

IMPROVEMENT IS ESPECIALLY DESIGNED THROUGH TRAFFIC AND HAS BEEN DECLARED LIMITED ACCESS HIGHWAY OR FREEWAY BY THE DIRECTOR OF HIGHWAYS IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 REVISED CODE OF OHIO.

STATE OF OHIO  
DEPARTMENT OF HIGHWAYS

ACI-1088 (3)

MONTGOMERY COUNTY  
DAYTON  
DAYTON EXPRESSWAY SYSTEM  
EXPRESSWAY-PART 3  
MOT-25-15-88

DAYTON EXPRESSWAY SYSTEM

Yellow

MOT.-25-15.88  
MONTGOMERY COUNTY  
CITY OF DAYTON  
HARRISON TOWNSHIP

LIMITED ACCESS

PART 3 - KEOWEE STREET TO NEFF ROAD

NOTE: Federal Project No. D-1088(3) appearing throughout these plans shall be considered to read ACI-1088(3).

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO DEPARTMENT OF HIGHWAYS, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH IN THE PLANS AND ESTIMATE.

THE RIGHT OF WAY FOR THIS IMPROVEMENT WILL BE PROVIDED BY THE STATE OF OHIO.

APPROVED DATE 12-18-57  
APPROVED DATE 1-18-57  
APPROVED DATE 12-19-57  
APPROVED DATE 12-14-57  
APPROVED DATE 1-3-58  
APPROVED DATE 12-30-57  
APPROVED DATE 1-2-58  
APPROVED DATE 1-2-1958  
APPROVED DATE 1-2-58  
APPROVED DATE 1-2-58

*Max L. Mitchell*  
CHIEF ENGINEER MIAMI CONSERVANCY DISTRICT

*W. H. Smith*  
DIRECTOR OF SERVICE AND BUILDINGS, CITY OF DAYTON

*W. H. Smith*  
CITY MANAGER, CITY OF DAYTON

*E. D. Ackerman*  
DIVISION DEPUTY DIRECTOR

*E. H. Mahoney*  
DEPUTY DIRECTOR OF PLANNING AND PROGRAMMING

*W. H. Ackerman*  
ENGINEER OF BRIDGES

*R. E. Shultz*  
ENGINEER OF LOCATION AND DESIGN

*R. E. Shultz*  
DEPUTY DIRECTOR OF DESIGN AND CONSTRUCTION

*R. E. Shultz*  
FIRST ASSISTANT DIRECTOR

*W. H. Ackerman*  
ACTING DIRECTOR OF HIGHWAYS

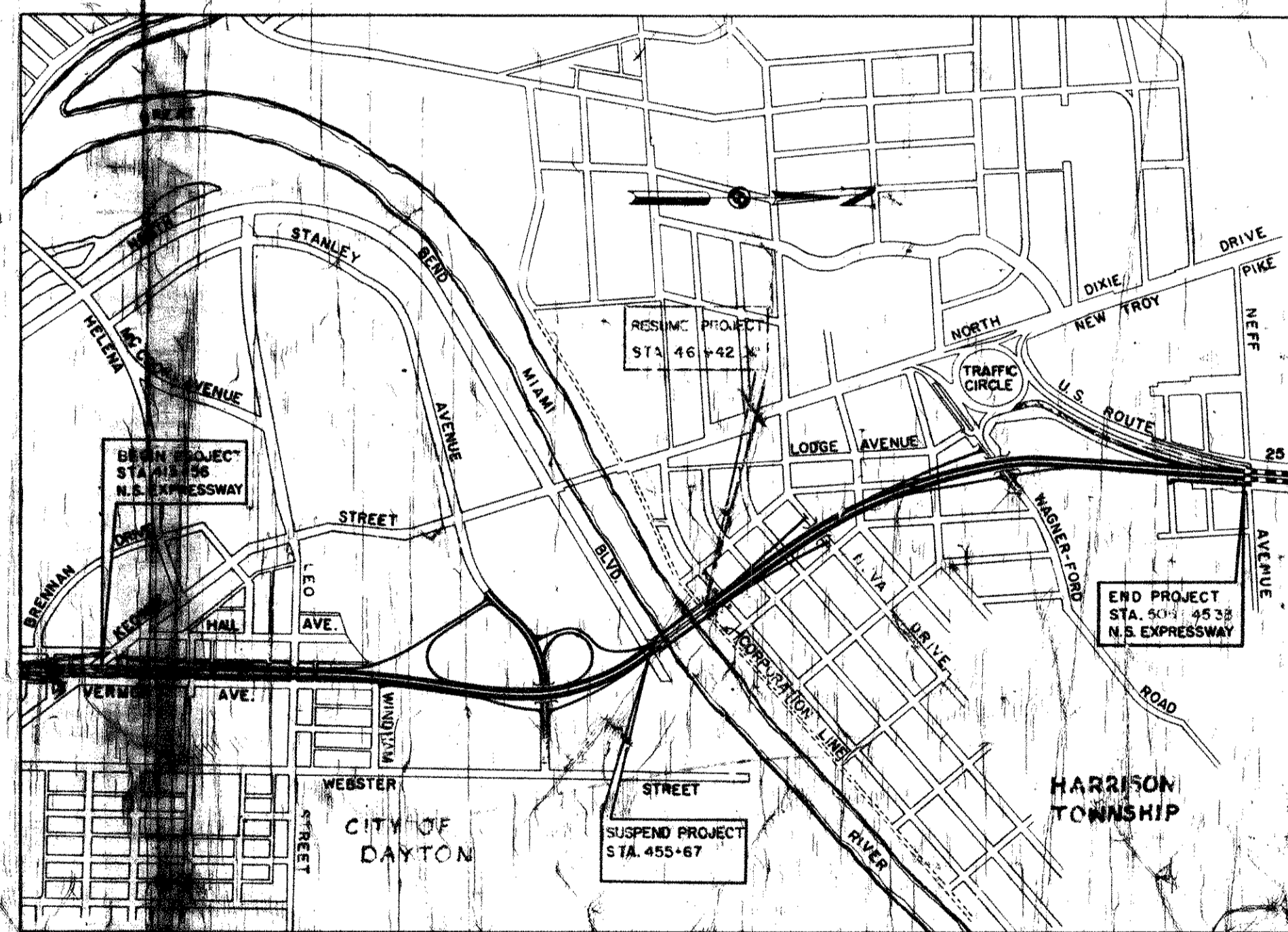
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Shts 114-113 revised 6-3-58  
Sheet 81 revised 2-30-58  
Sheets 103, 112 & 144 revised 1-16-58

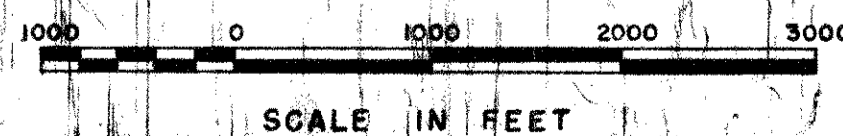
LINE DATA

RESUME PROJECT	STA. 413+56.00	
SUSPEND PROJECT	STA. 455+67.00	4211.00 LIN. FT.
RESUME PROJECT	STA. 461+42.00	4403.83 LIN. FT.
END PROJECT	STA. 505+43.33	
TOTAL LENGTH OF PROJECT		8614.83 LIN. FT. = 1.631 MILES
AVENUE	STA. 0+00 TO STA. 15+40 = 1494.91 LIN. FT.	
	STA. 410+10 TO STA. 413+56 = 346.00 LIN. FT.	
	STA. 455+67 TO STA. 456+95 = 128.00 LIN. FT.	
	STA. 460+52 TO STA. 461+42 = 90.00 LIN. FT.	
	STA. 505+43.33 TO STA. 505+84 = 40.51 LIN. FT.	
	STA. 0+56 TO STA. 8+64 = 826.00 LIN. FT.	
WORK		11,537.91 LIN. FT. = 2.185 MILES.



LOCATION PLAN

Sheets 103, 110, 112, 117, 119, 122, 123, 132, 134, 138, 139, 140, 141, 143 & 144 revised 4-28-59.



PORTION TO BE IMPROVED  
OTHER HIGHWAYS AND STREETS  
FUTURE WORK

SUPPLEMENTAL SPECIFICATIONS

NUMBER	DATE	BY
5	6-1-55	
18	REV	
E-101	1-1-55	
S-114	REV	

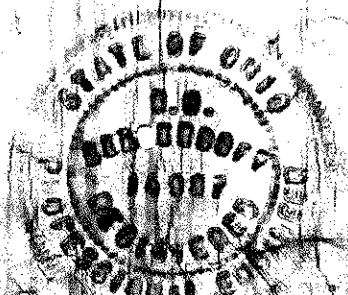
STANDARD DRAWINGS			
NUMBER	DATE	NUMBER	DATE
S-27	4-1-54	I-8 C.B. 2-50	2-6 5-11-52
		I-8 C.B. 3-1	2-4 5-11-52
I-21-23	8-1-56		
L-3-A	4-1-50	I-8 I.N.O. 2	12-1-54
L-3	4-1-50	I-8 M.H. NO. 1	5-1-52
R-1	1-3-55	I-8 M.H. NO. 1-A	1-3-55
T-35	1-2-56	I-8 M.H. NO. 2	5-1-52
L.J. NO. 1	7-1-55	I-12	7-1-54
T.J.	5-1-56		4-1-57
AS-1-54	12-1-54	I-15 NO. 1	8-1-55
OS-1	12-17-56	I-15 NO. 2	6-1-57
I-1, 2, 3, 4, 5	2-20-45		
I-6, 7, 8, 2-AB	8-1-54	6-7-07	6-1-56

Revised R/W Plan, Sheet No. 75 by adding three non-limited access parcels J.R.B. 5-14-58

DEPARTMENT OF COMMERCE  
BUREAU OF PUBLIC ROADS

APPROVED:

ENGINEER

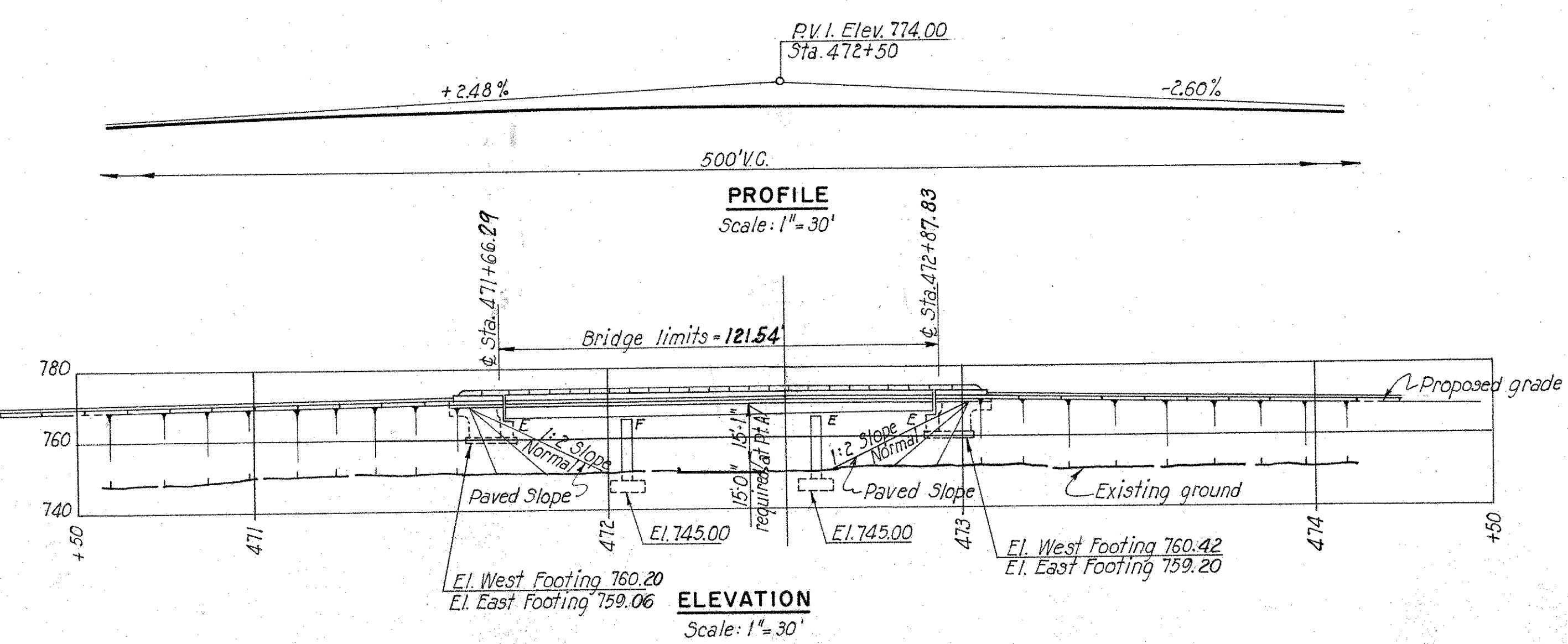


RECOMMENDED BY  
STAMMEN & BERGENDOFF  
ENGINEERS  
MELAND NEW YORK

H. G. SOURS  
ASSOCIATE  
COLUMBUS

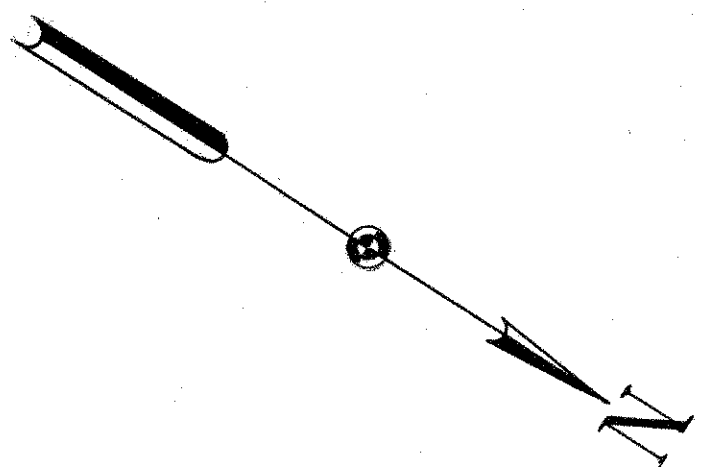


**PLAN**  
Scale: 1" = 30'

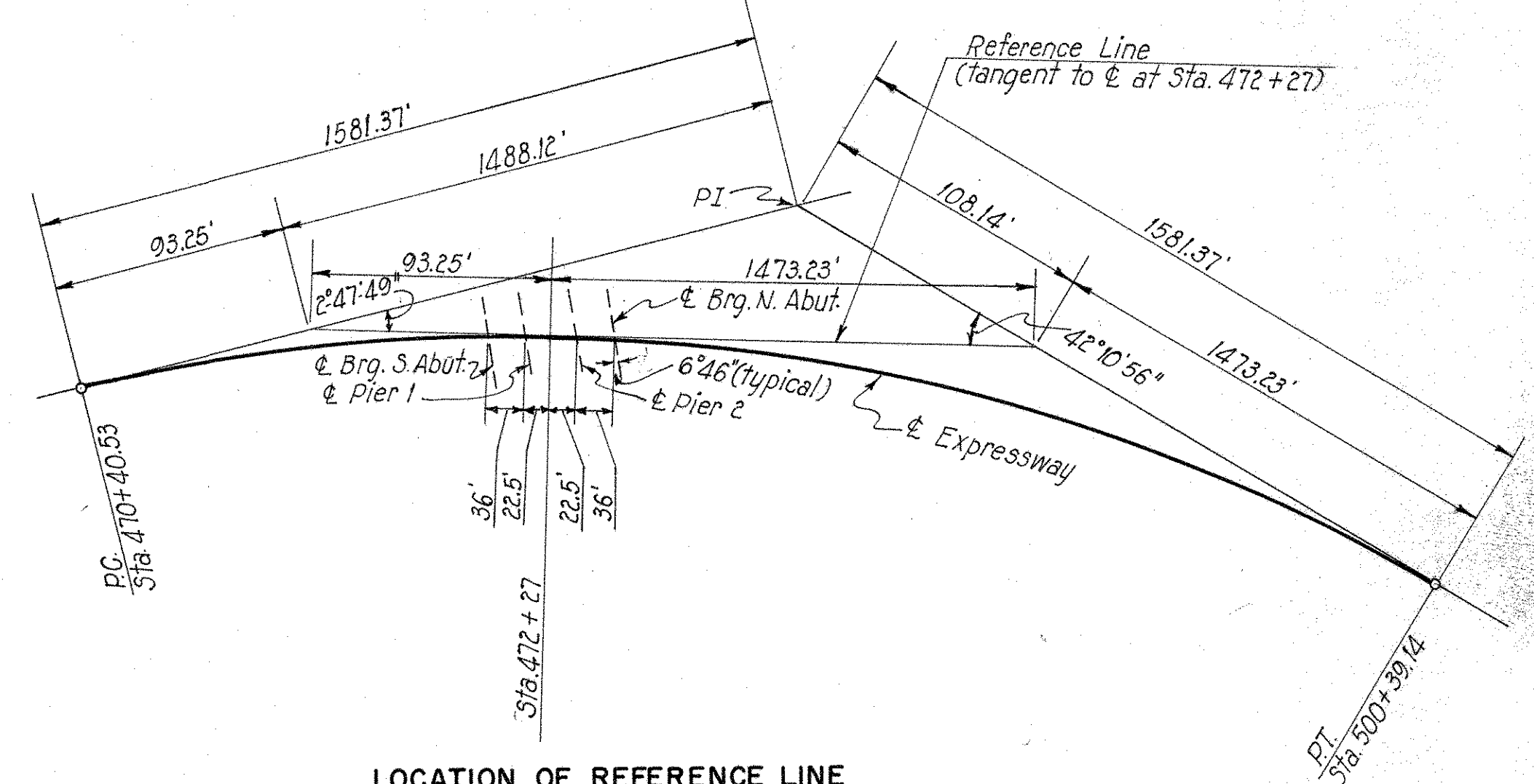


**PROFILE**  
Scale: 1" = 30'

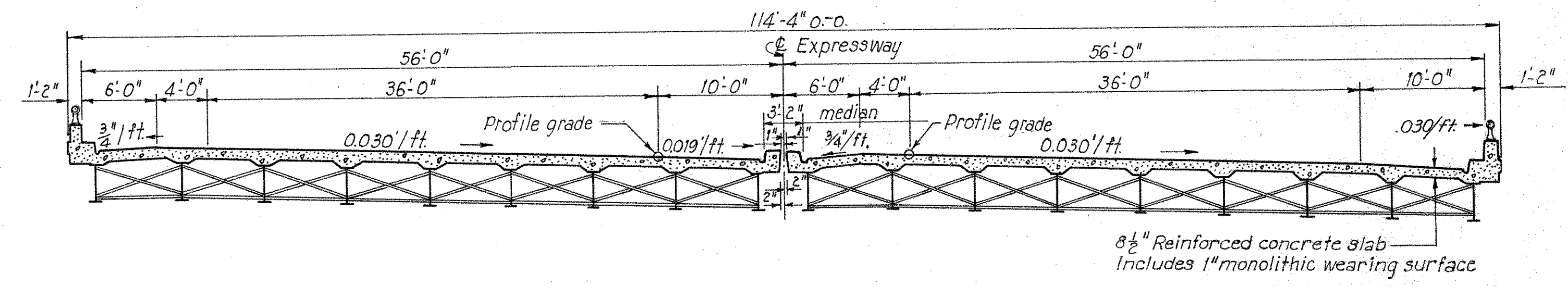
**ELEVATION**  
Scale: 1" = 30'



Curve Data  
 $\Delta = 44^\circ 58' 45''$   
 $D = 1^\circ 30' 00''$   
 $R = 3819.72$   
 $L = 2998.61$   
 $T = 1581.37$



**LOCATION OF REFERENCE LINE**  
No Scale



**TYPICAL CROSS SECTION**  
Scale: 8" = 1'-0"

**LEGEND**

--- Gas Line  
 - - - - - Property Line

**PROPOSED STRUCTURE**

Type: 3 span continuous rolled beam bridges with reinforced concrete deck and substructure.  
 Spans: 36'; 45'; 36'-117'  
 Roadway: 25'3" roadways with 1'-0" curbs.  
 Loading: CF2000 (51) adequate for AASHTO alternate loading.  
 Skew: 6°-46' R.F.  
 Surface course: One inch monolithic concrete wearing surface.  
 Approach Slab: AS-1-54 (25' long)  
 Alignment: 1°-30' curve.  
 Superelevation: .03 ft. per ft.

Note:  
 Foundation soundings: Foundation design and foundation quantities are based on a study of rod soundings and soil-sampling soundings made at the site. This sounding information may be inspected in the office of the Bureau of Bridges in Columbus or in the Division office, but the State assumes no responsibility for the accuracy thereof.

HOWARD, NEEDLES, TAMMEN & BERGENDOFF  
 CONSULTING ENGINEERS  
 KANSAS CITY CLEVELAND NEW YORK

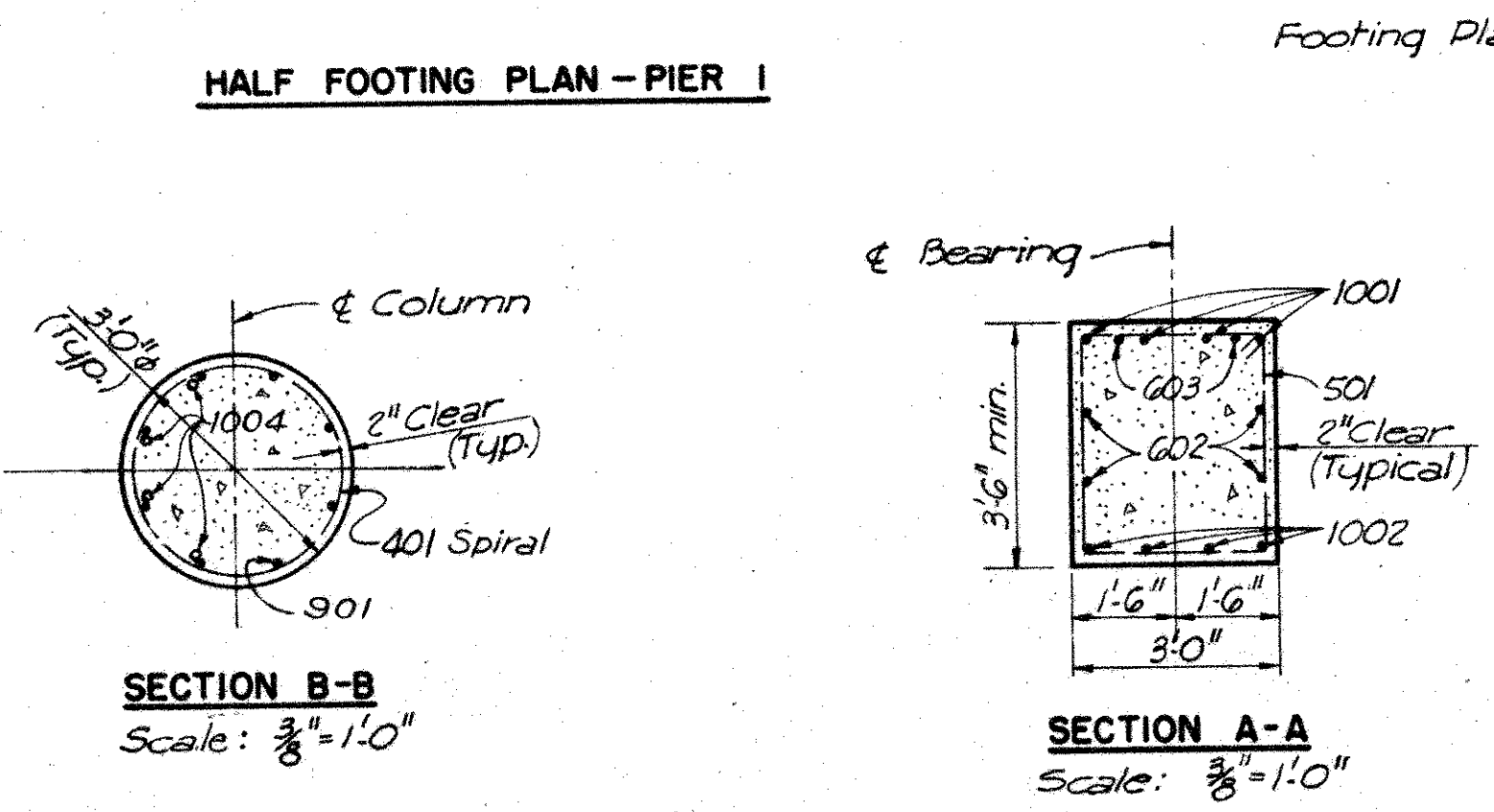
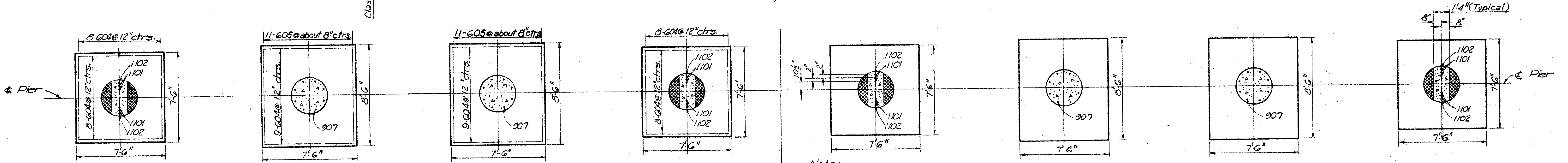
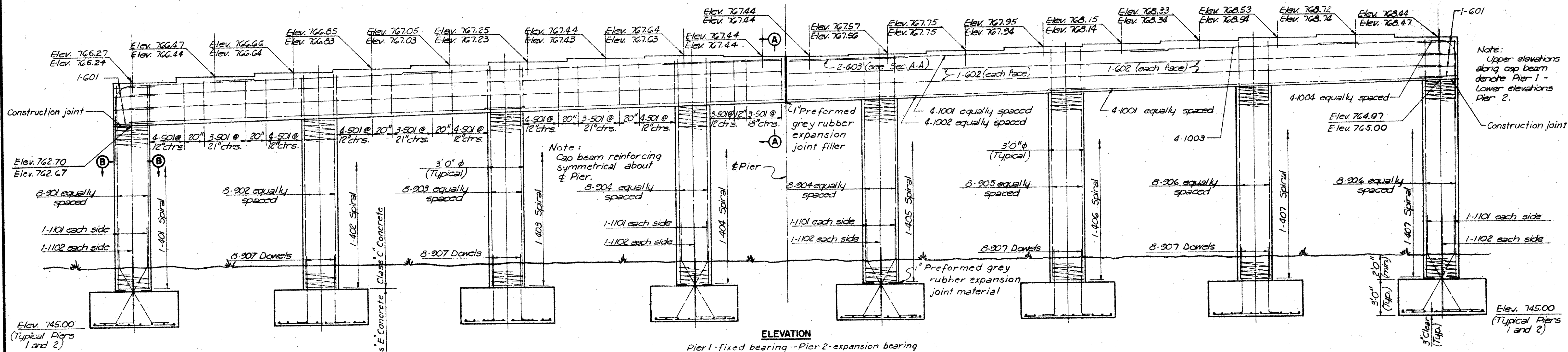
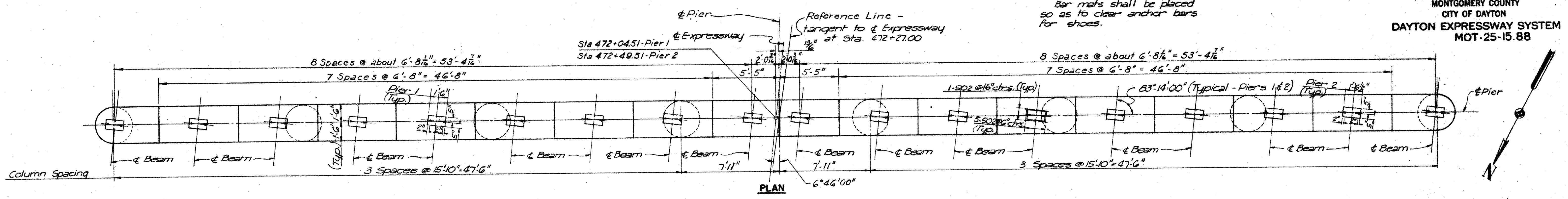
**SITE PLAN**  
 EXPRESSWAY OVER NEVA DRIVE

BR. NO. MOT- 25-1703 STA. \_\_\_\_\_  
 SCALE: As shown

**DAYTON EXPRESSWAY**  
 DAYTON, MONTGOMERY COUNTY

DRAWN G.M.R. TRACED R.R. CHECKED G.L.B. REVIEWED G.A.  
 DATE 8-6-57 DATE 8-19-57 DATE 8-26-57 DATE 10-16-57

Note:  
Bar mats shall be placed so as to clear anchor bars for shoes.



Notes:  
For Reinforcement Schedule see sheet 134.  
For details of bearing plates see sheets 104 and 105.  
Maximum soil pressure under Piers is 2.90 tons per square foot.

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CONSULTING ENGINEERS  
KANSAS CITY CLEVELAND NEW YORK

**PIER 1 AND 2**  
EXPRESSWAY OVER NEVA DRIVE

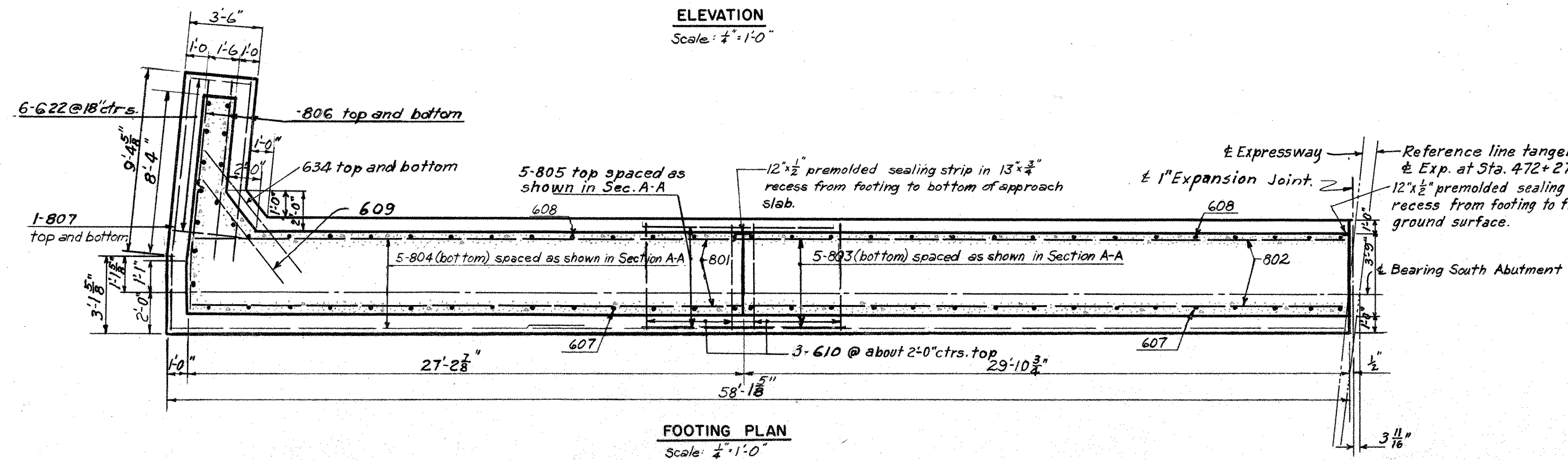
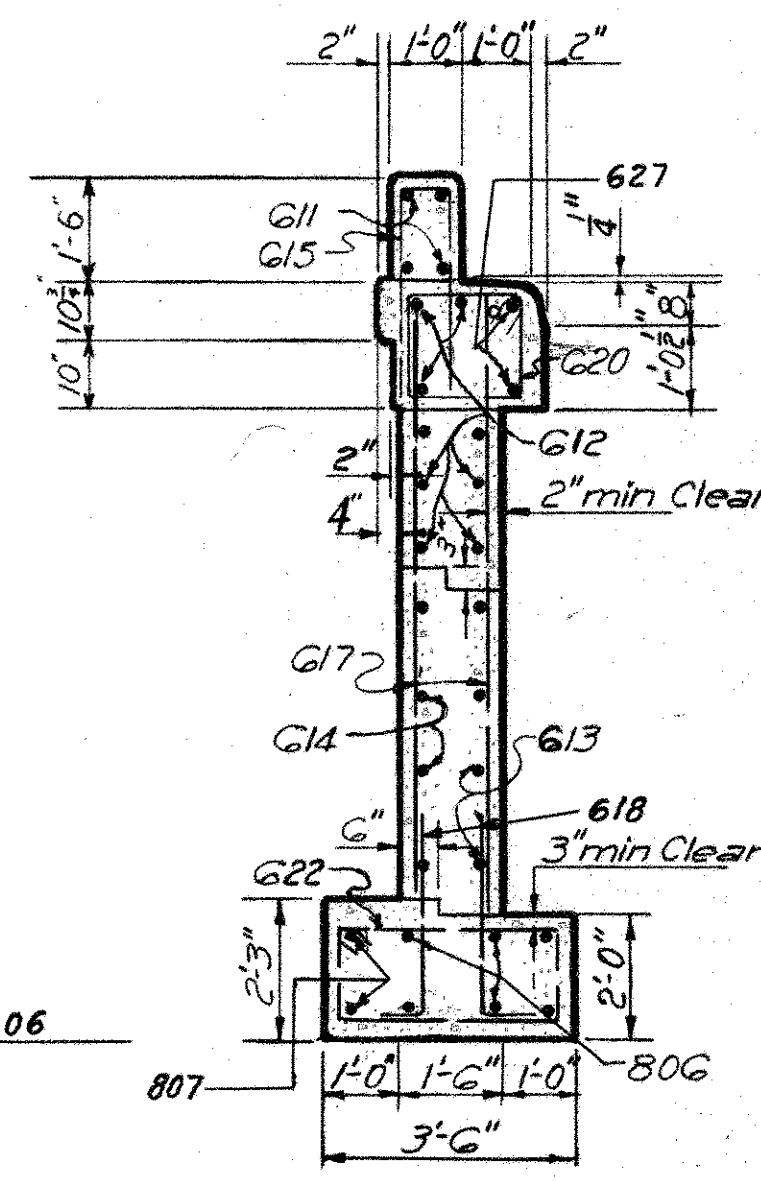
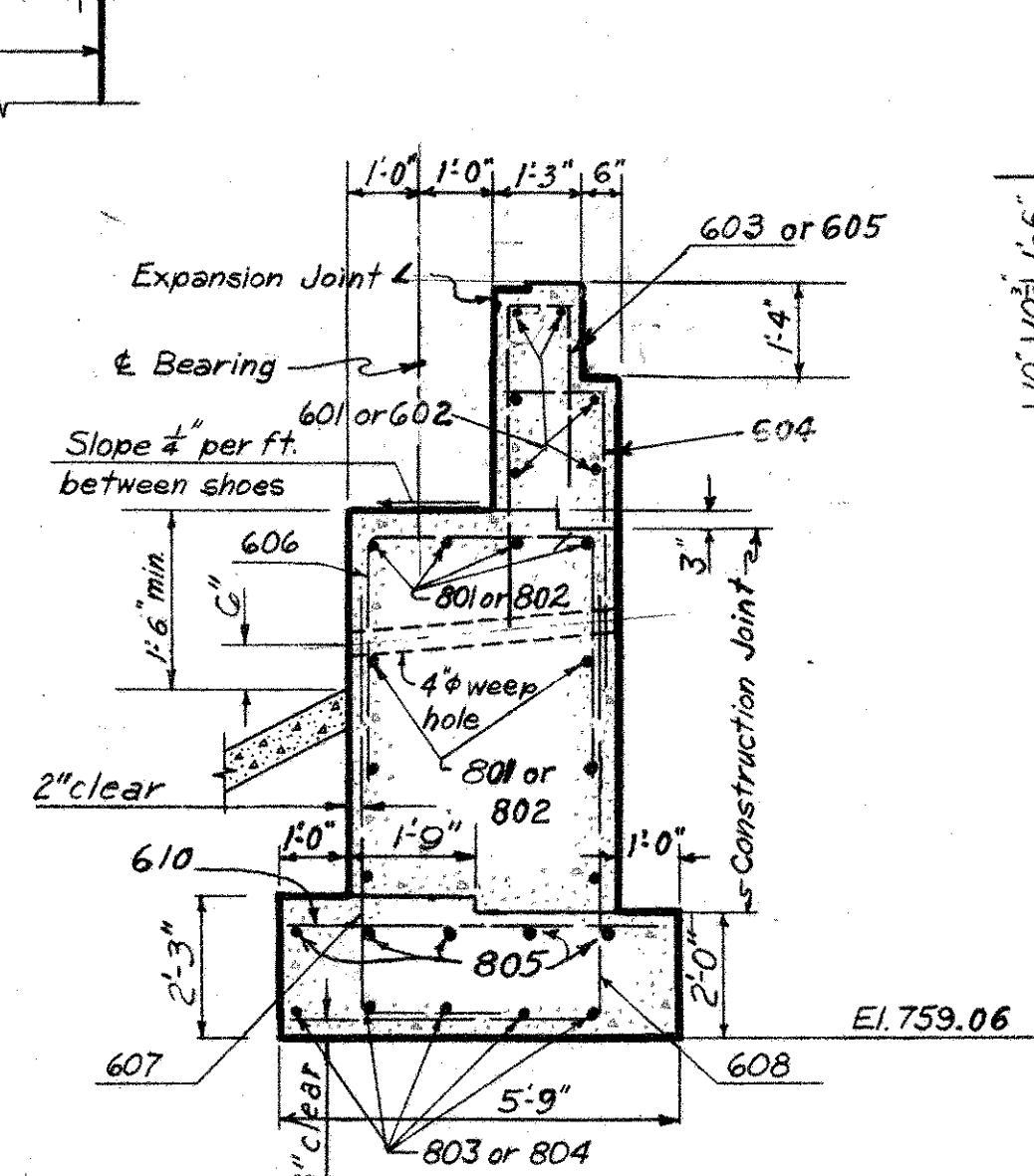
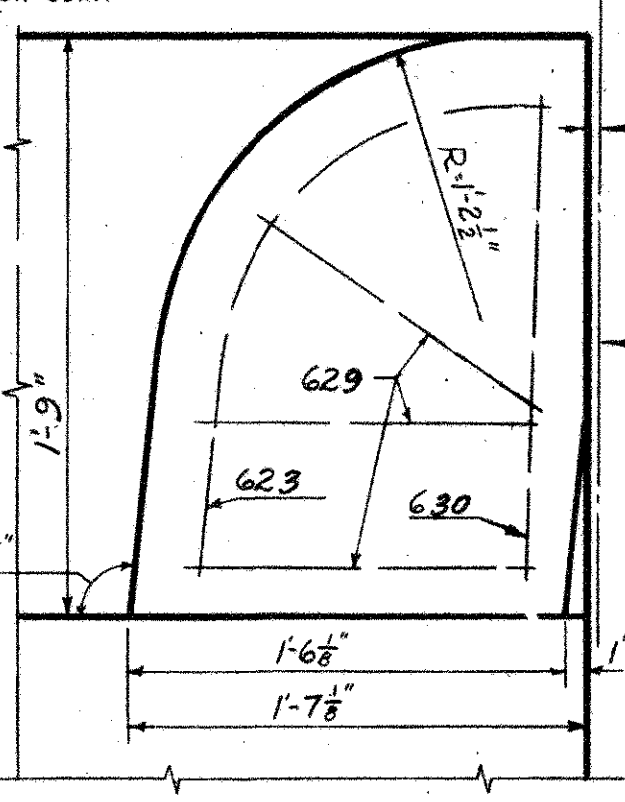
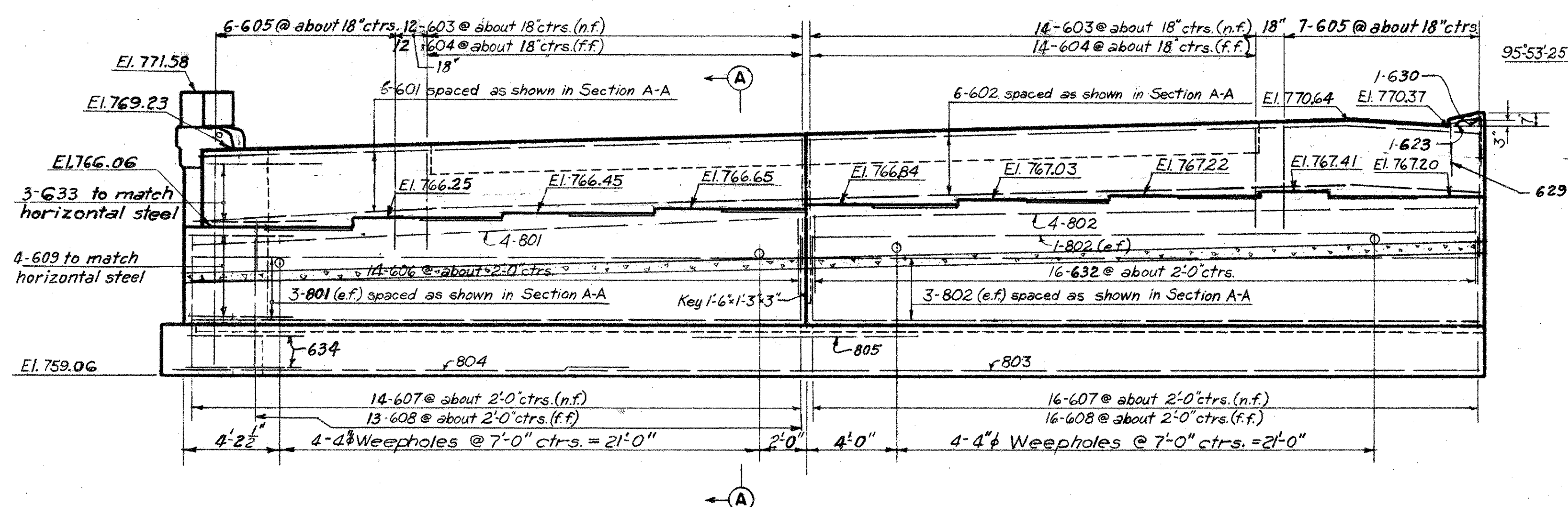
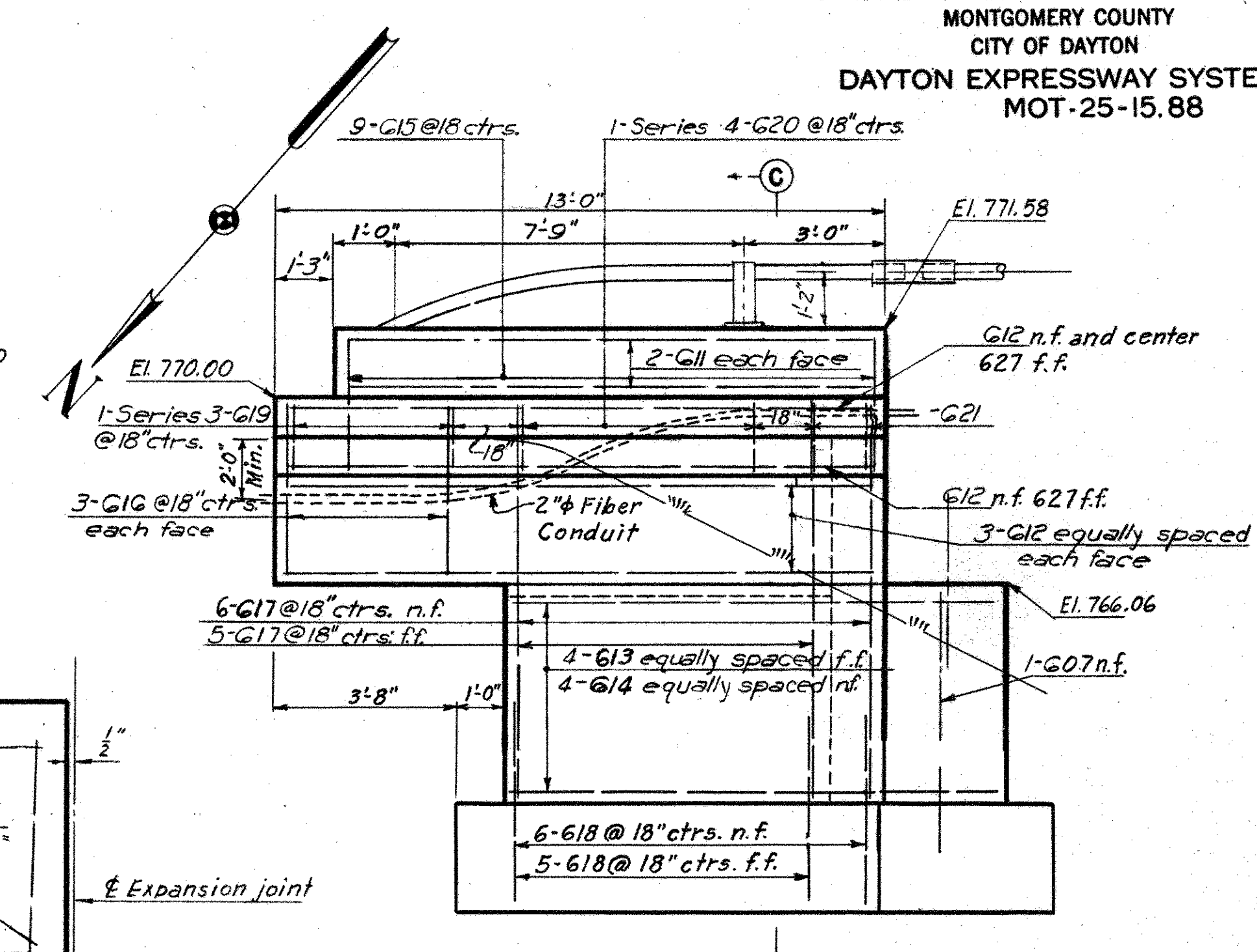
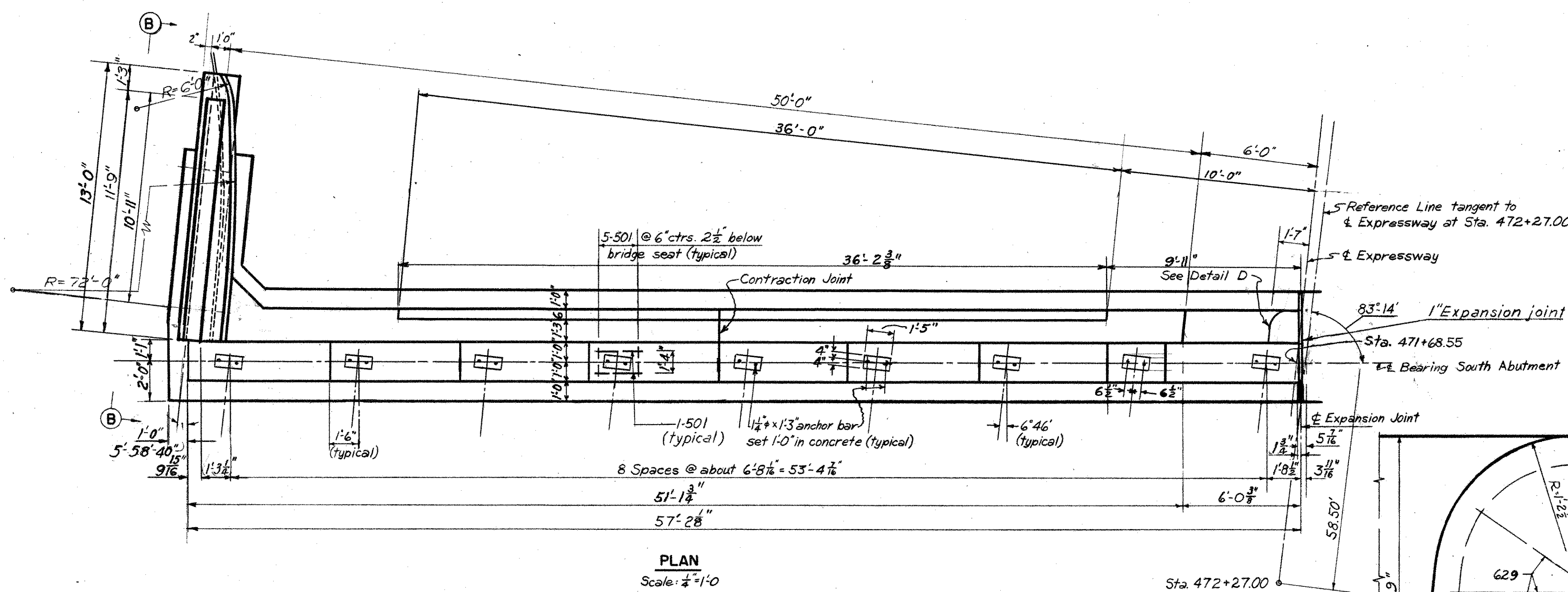
BR. NO. MOT-25-1703 STA. 471 + 66.29  
SCALE: 1/8"=1'-0" Except as noted. 472 + 87.83

**DAYTON EXPRESSWAY SYSTEM**  
DAYTON, MONTGOMERY COUNTY, OHIO

DRAWN	TRACED	CHECKED	REVIEWED	REVISED
DATE 2-5-57	DATE	DATE 10-22-57	DATE G.A.	DATE 10-26-57

944 SHEET 127

MONTGOMERY COUNTY  
CITY OF DAYTON  
DAYTON EXPRESSWAY SYSTEM  
MOT-25-15.88



Notes:  
For West Half of South Abutment see sheet 129.  
For Reinforcement Schedule see sheet 134  
For details of slope pavement see sheet 104  
For details of porous backfill see sheet 104  
For details of expansion joint see sheet 105  
n.f. = near face  
f.f. = far face  
e.f. = each face  
Maximum soil pressure under the abutment is 1.46 tons per sq ft.  
Procedure: The embankment shall be placed and compacted to full height of embankment slopes or subgrade, after which excavation shall be made for the abutment.

HOWARD, NEEDLES, TAMMEN & BERGENDOFF  
CONSULTING ENGINEERS  
KANSAS CITY CLEVELAND NEW YORK

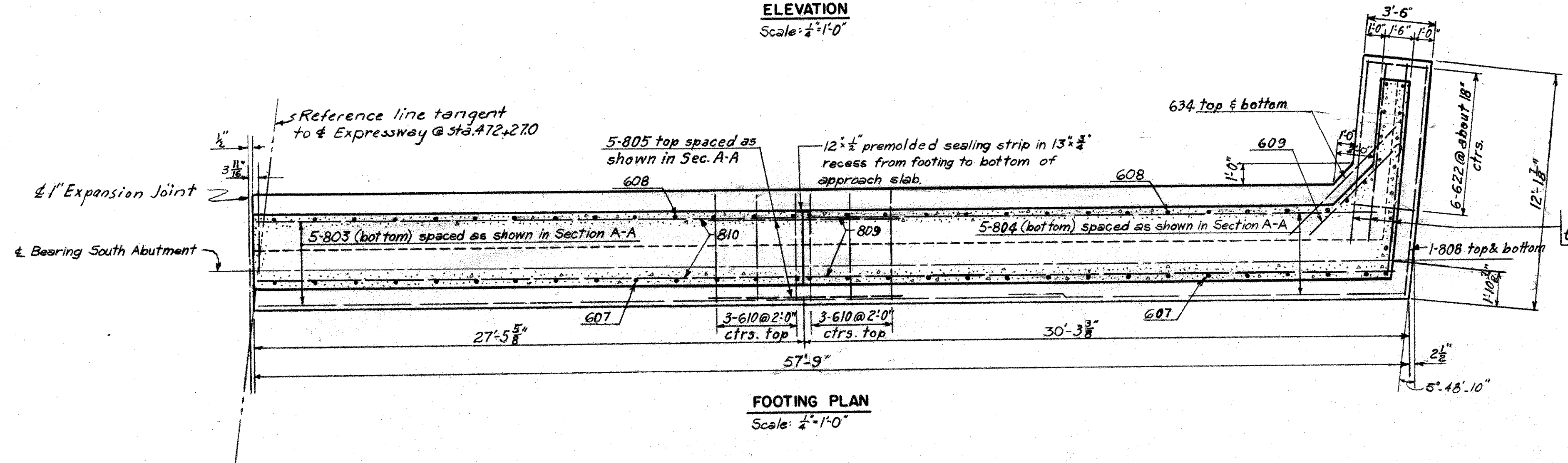
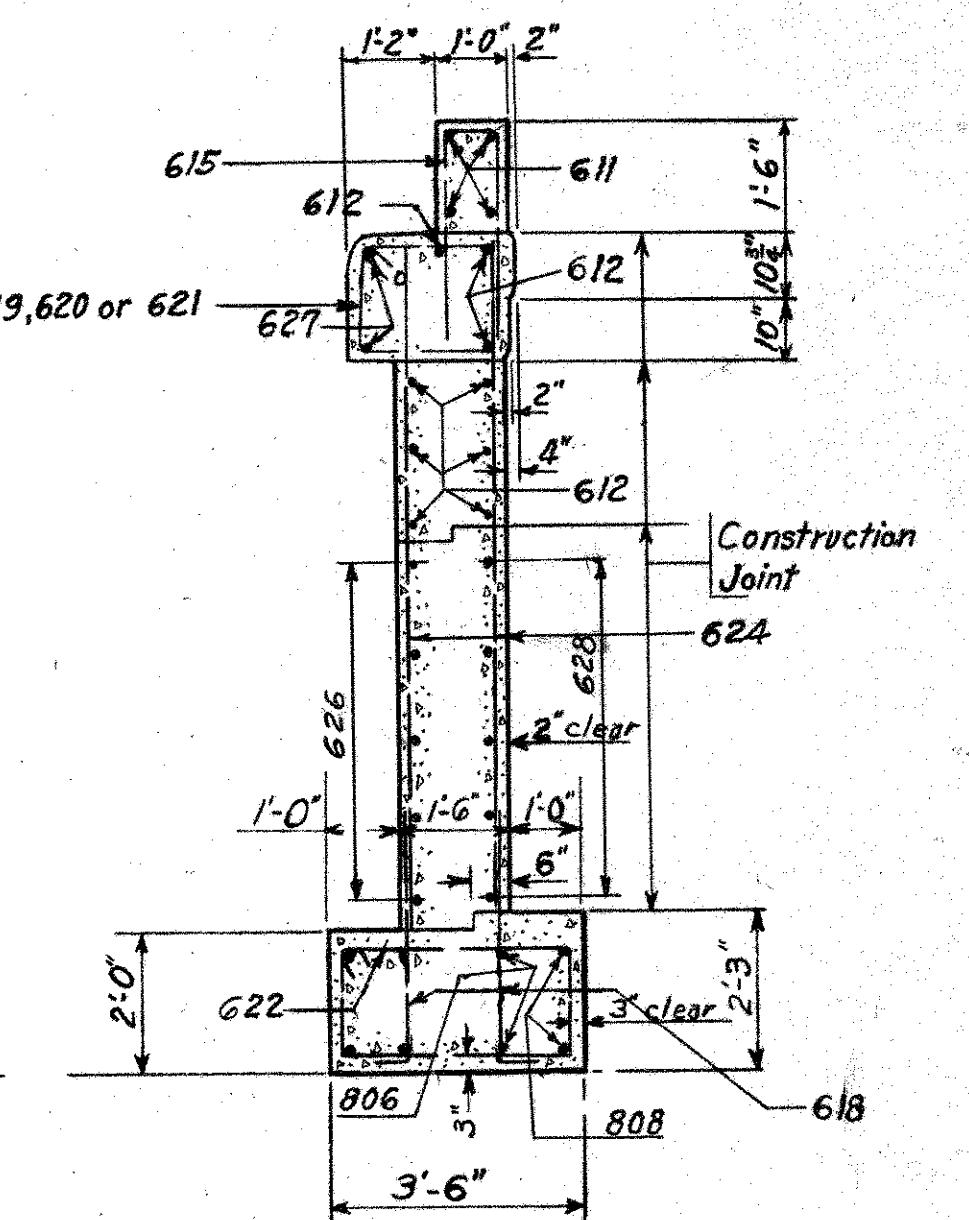
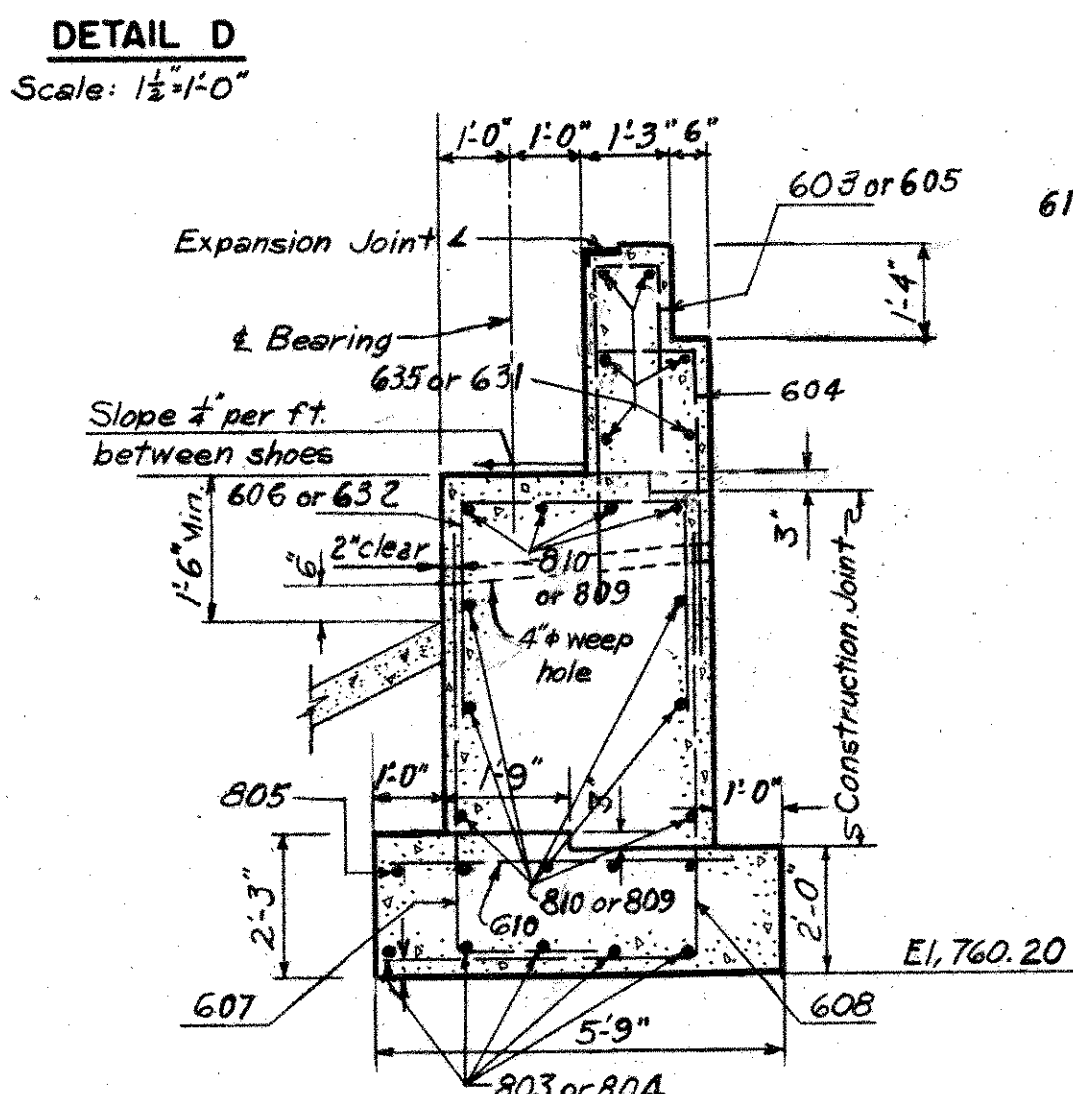
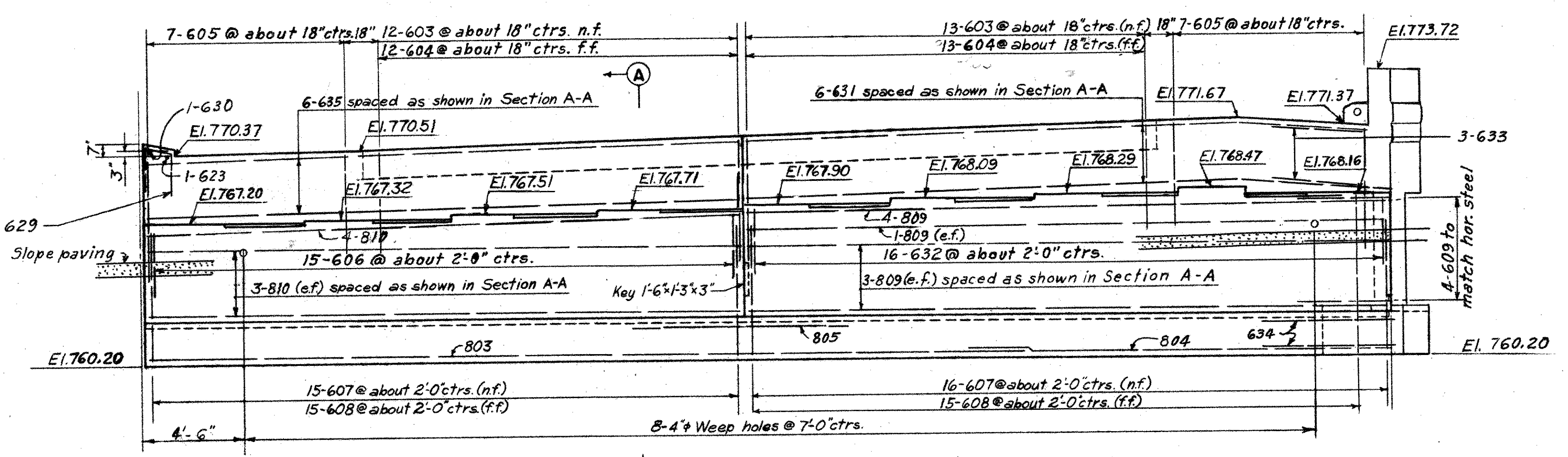
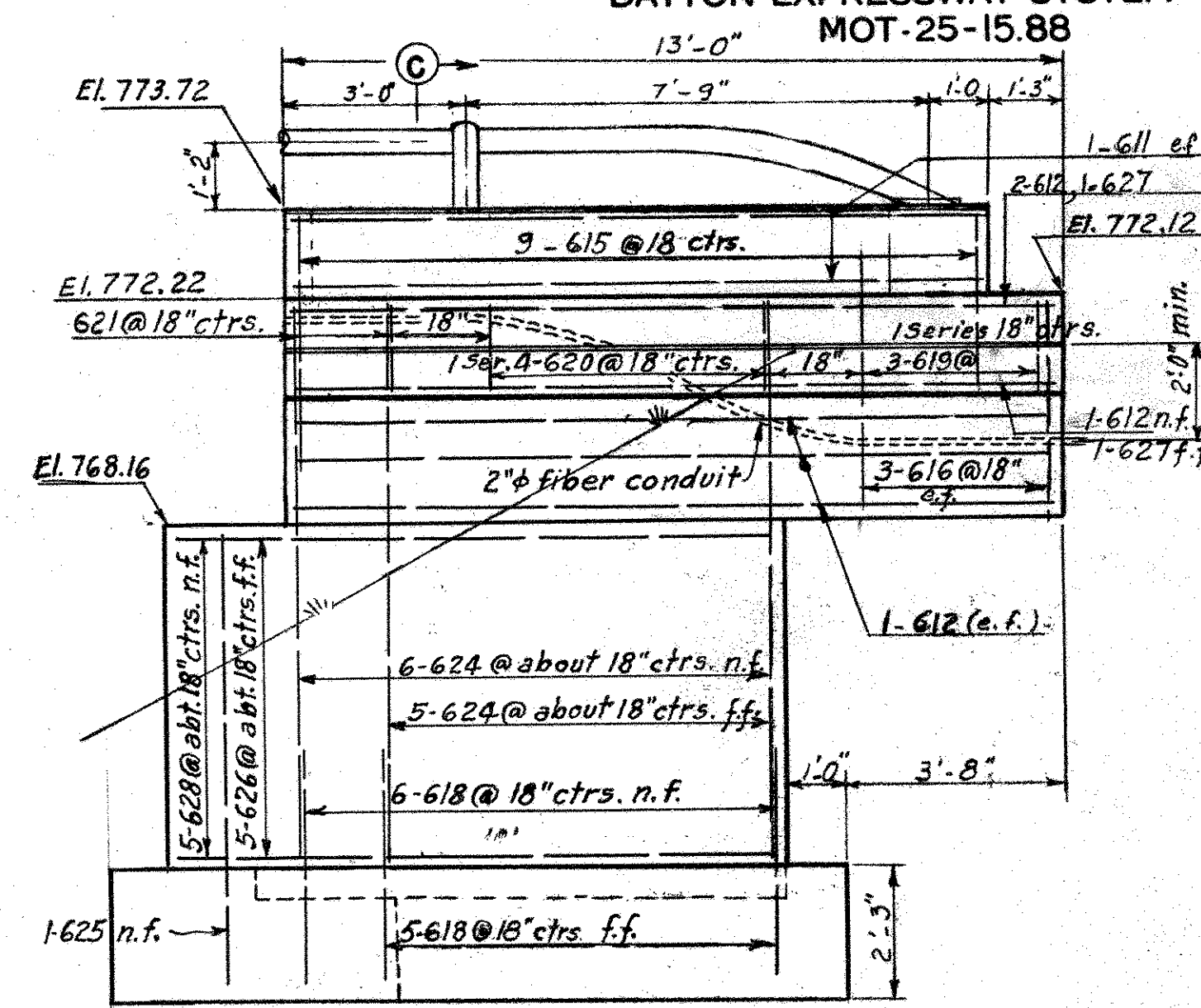
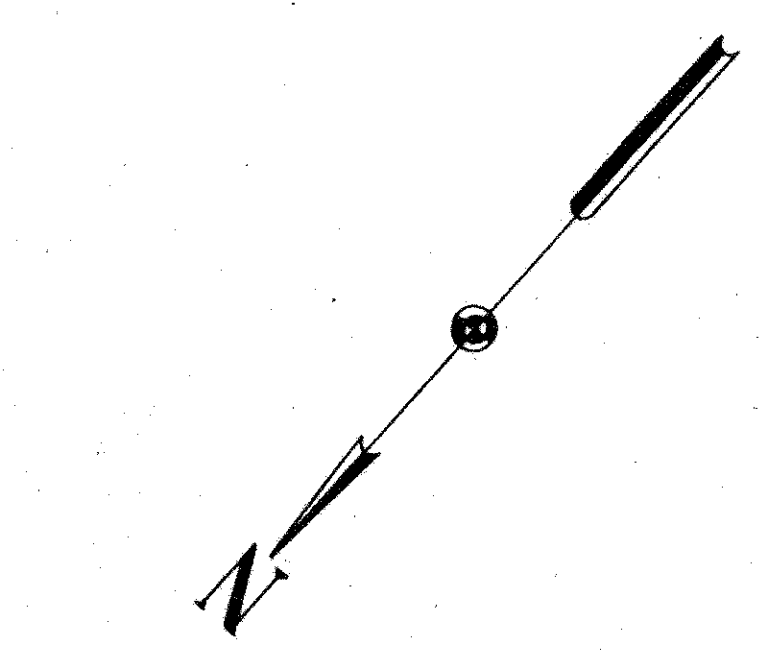
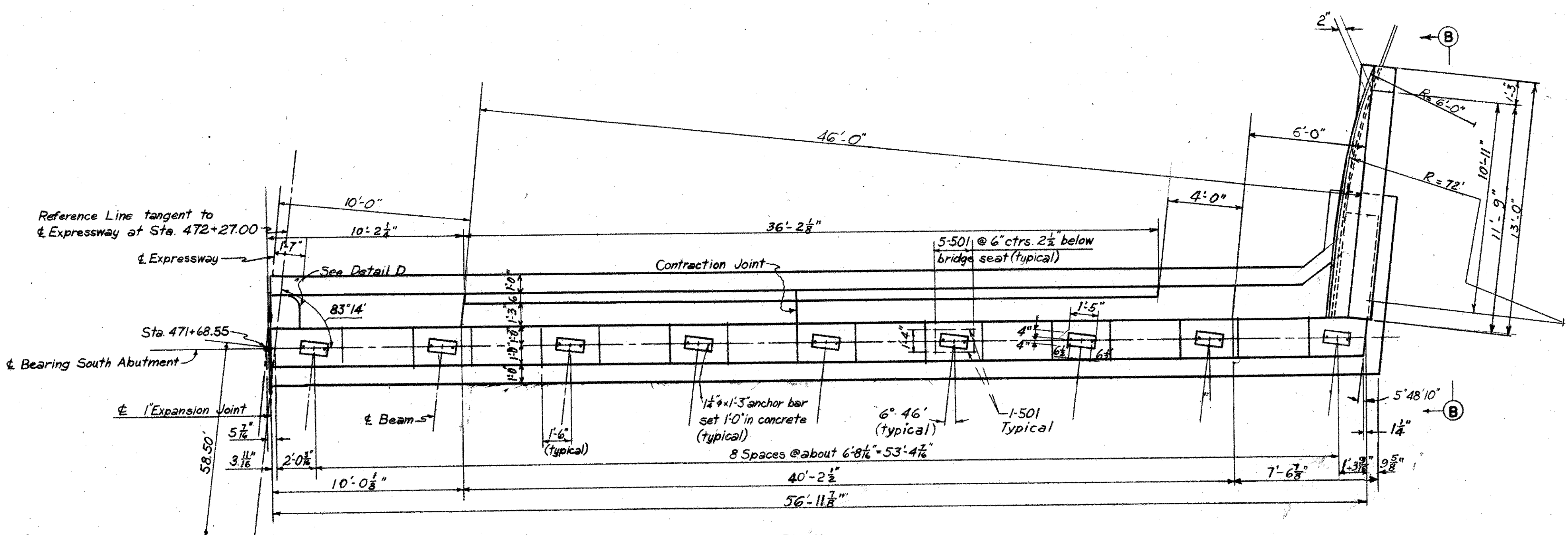
**EAST HALF OF SOUTH ABUTMENT**  
EXPRESSWAY OVER NEVA DRIVE  
BR. NO. MOT-25-1703 STA. 471 + 66.29  
SCALE: As shown 472 + 87.83

**DAYTON EXPRESSWAY SYSTEM**  
DAYTON, MONTGOMERY COUNTY, OHIO

DRAWN DTI	TRACED	CHECKED RMS	REVIEWED BA	REVISED
DATE 2-25-57	DATE	DATE 10-25-57	DATE 10-26-57	DATE

944 SHEET 128

MONTGOMERY COUNTY  
CITY OF DAYTON  
DAYTON EXPRESSWAY SYSTEM  
MOT-25-15.88



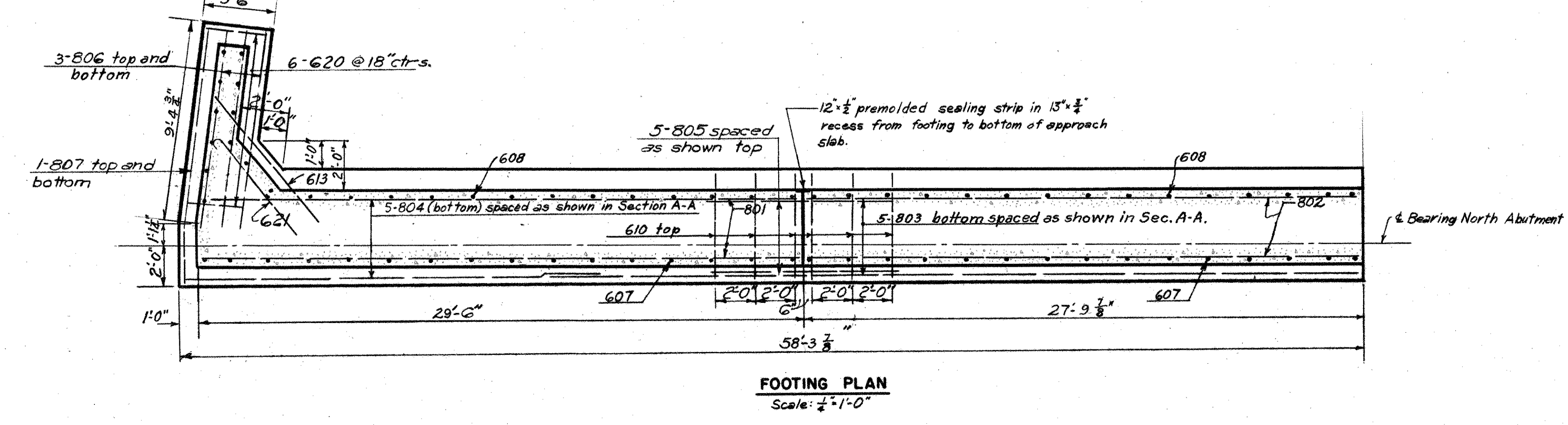
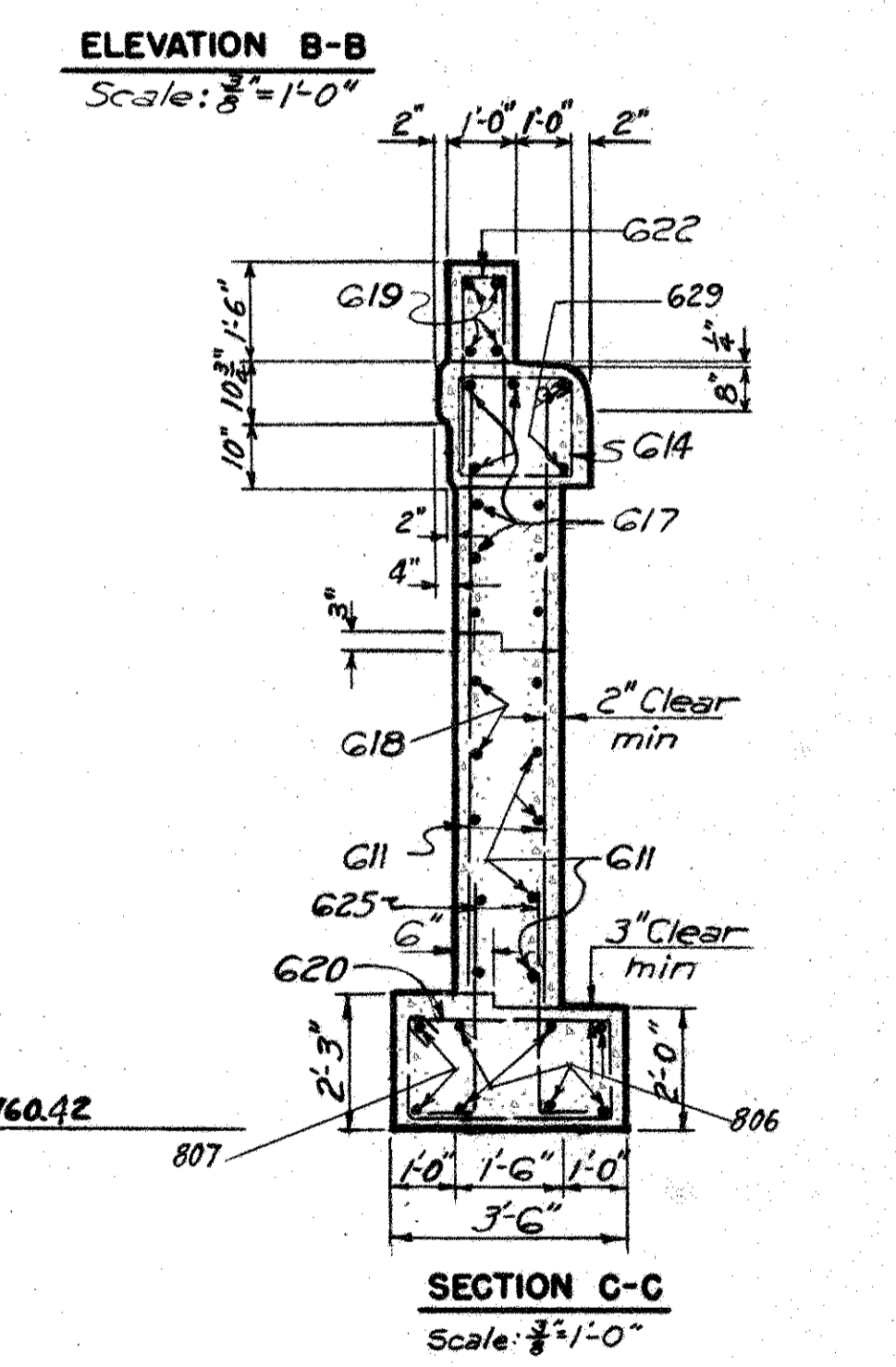
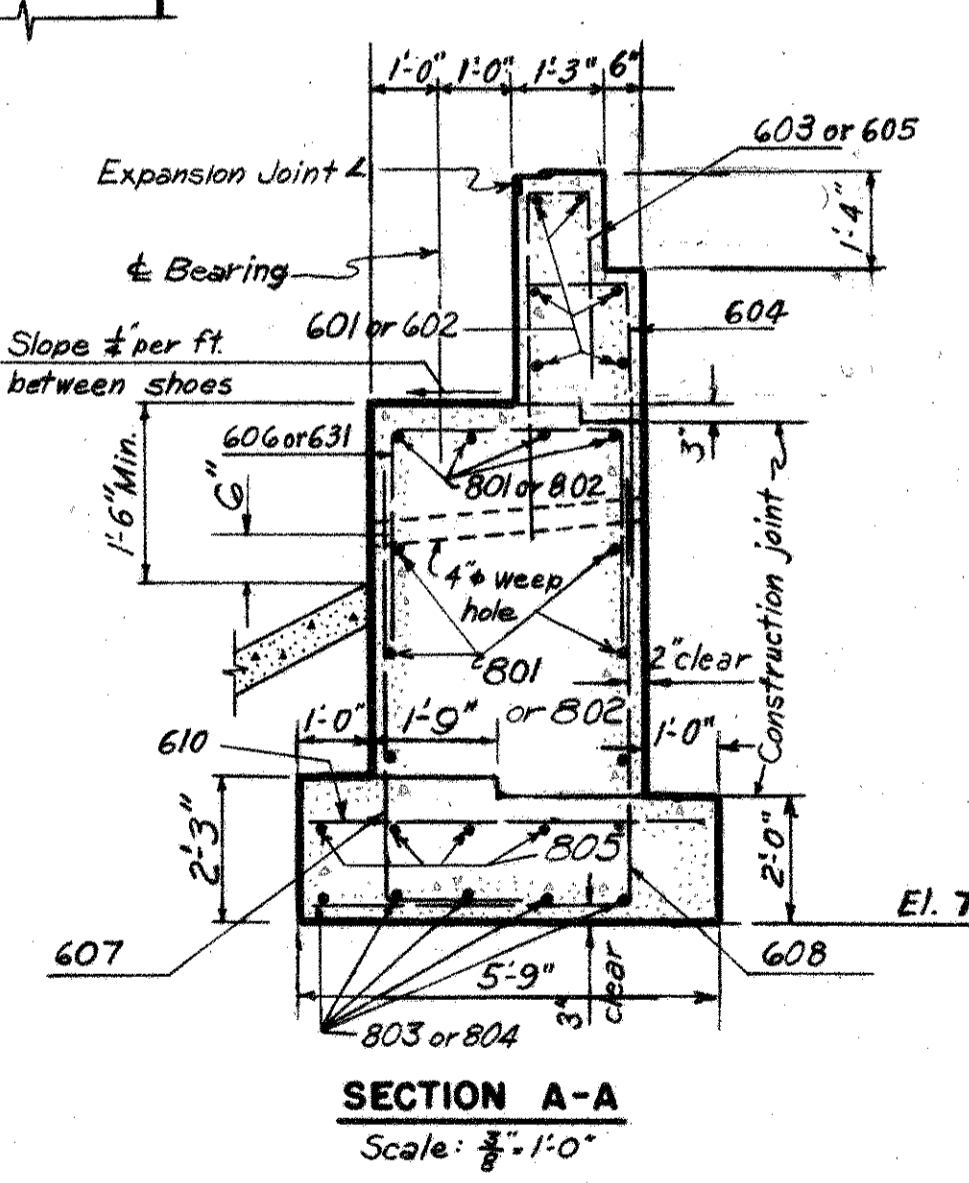
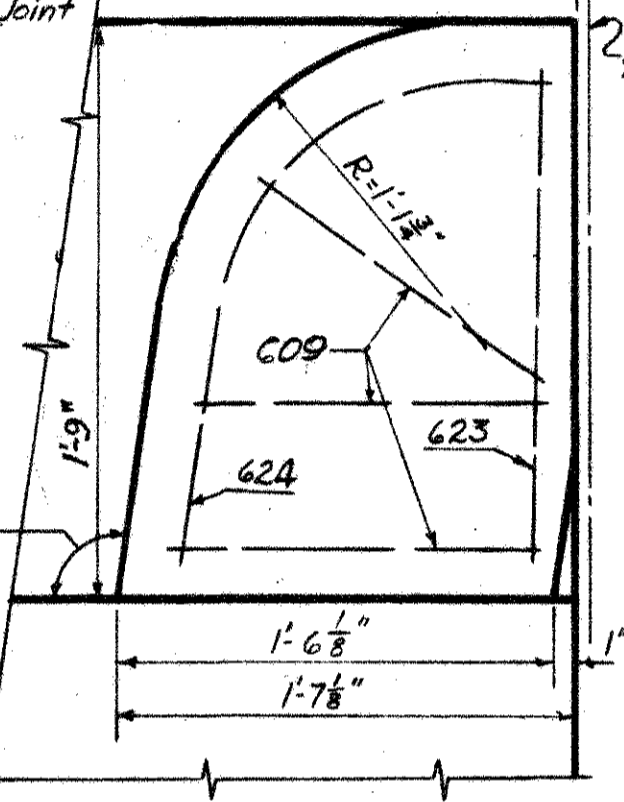
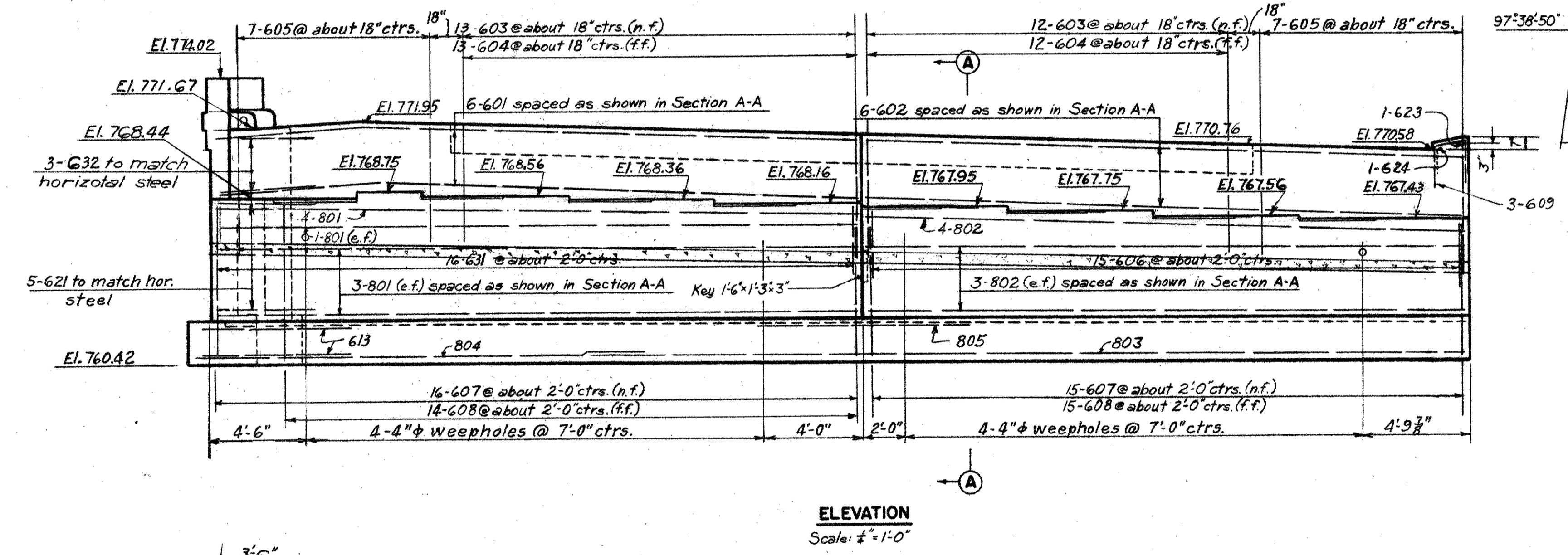
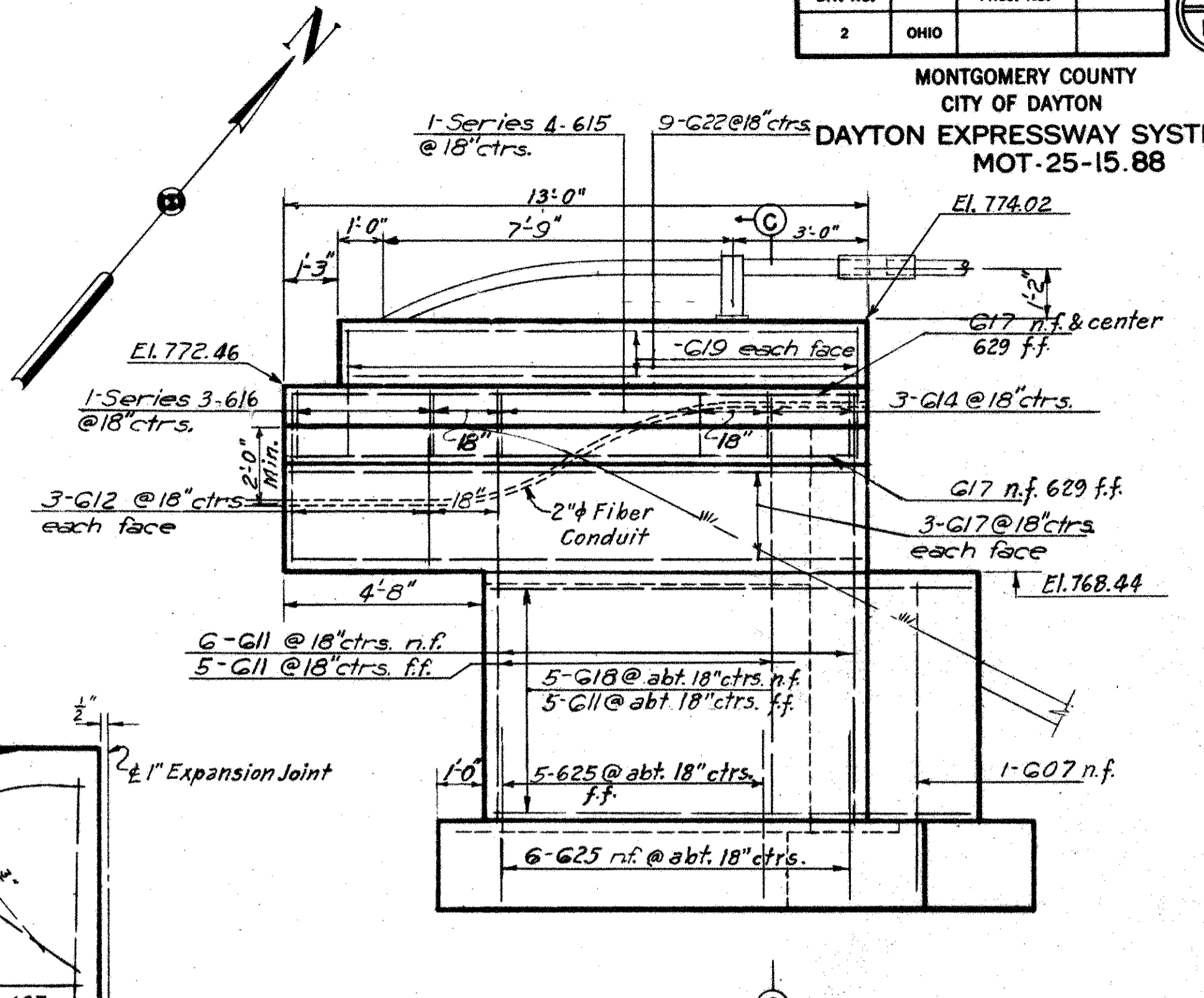
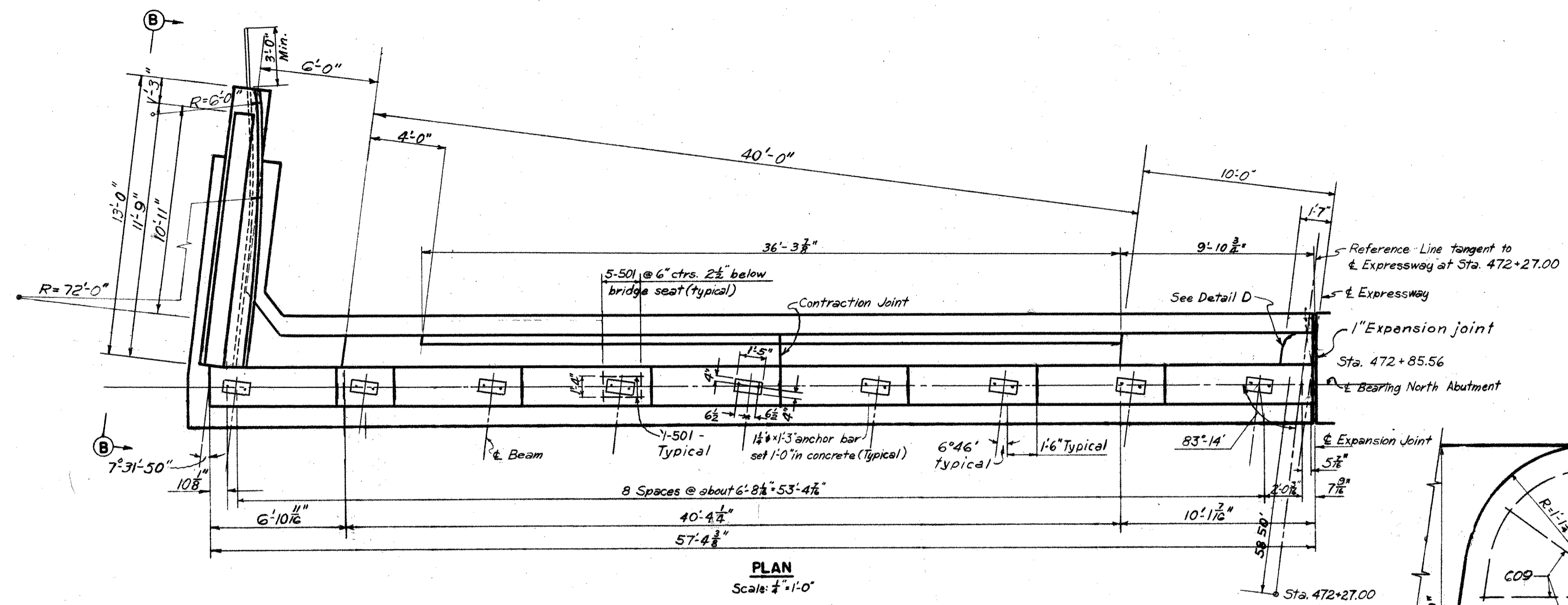
Notes:  
For East Half of South Abutment see sheet 128  
For Reinforcement Schedule see sheet 134  
For details of slope pavement see sheet 104  
For details of porous backfill see sheet 104  
For details of expansion joint see sheet 105  
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Maximum soil pressure under the abutment is 1.46 tons per sq. ft.  
Procedure: The embankment shall be placed and compacted to full height of embankment slopes or subgrade, after which excavation shall be made for the abutment.

HOWARD, NEEDLES, TAMMEN & BERGENDOFF  
CONSULTING ENGINEERS  
KANSAS CITY CLEVELAND NEW YORK

WEST HALF OF SOUTH ABUTMENT  
EXPRESSWAY OVER NEVA DRIVE  
BR. NO. MOT-25-1703 STA. 471 + 66.29  
SCALE: As shown 472 + 87.83  
DAYTON EXPRESSWAY SYSTEM  
DAYTON, MONTGOMERY COUNTY, OHIO

DRAWN	DTI	TRACED	CHECKED	RM	REVIEWED	REVISION
DATE	3-4-57	DATE	11-26-57	DATE	10-26-57	944 SHEET 129

MONTGOMERY COUNTY  
CITY OF DAYTON  
**DAYTON EXPRESSWAY SYSTEM**  
MOT-25-15.88



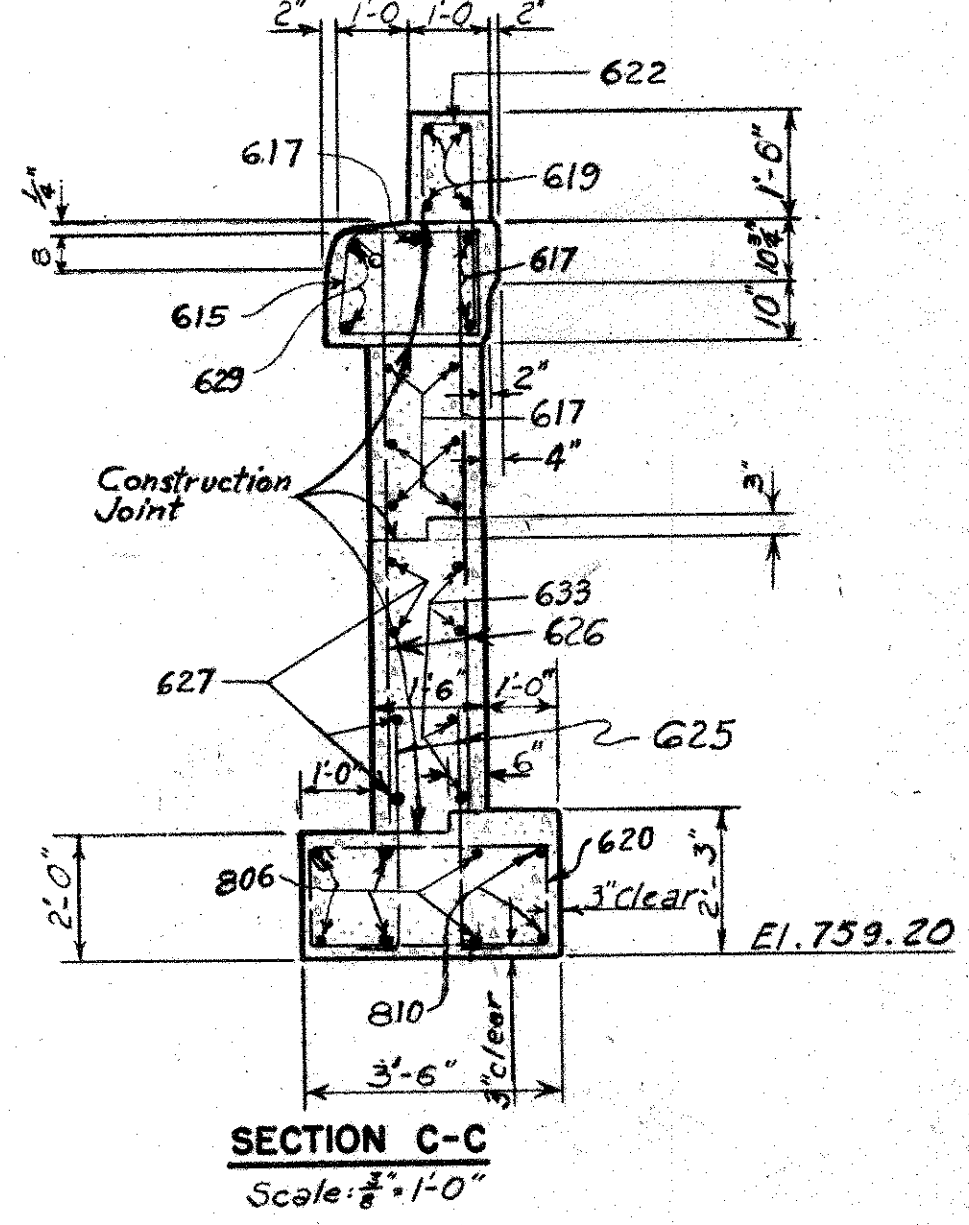
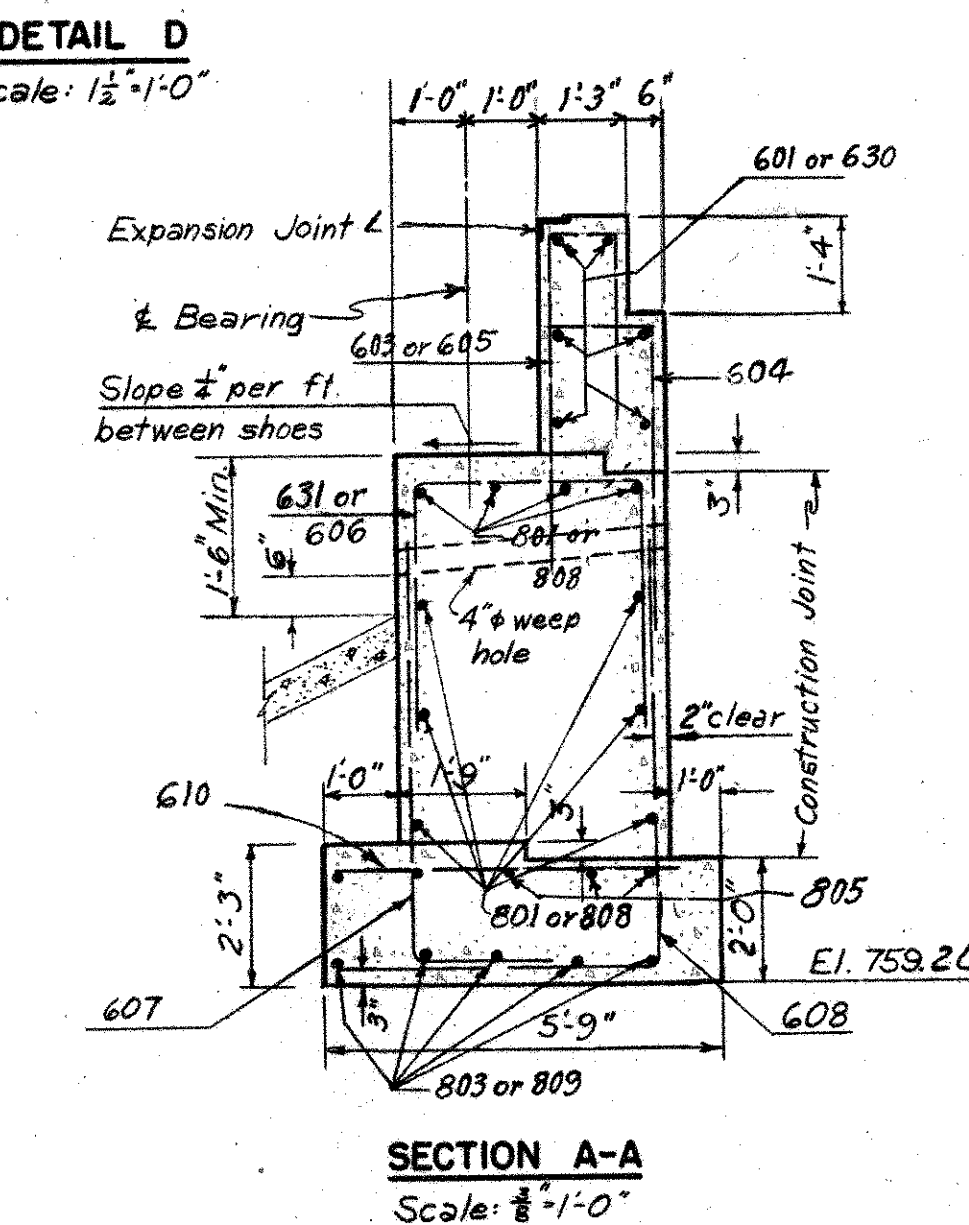
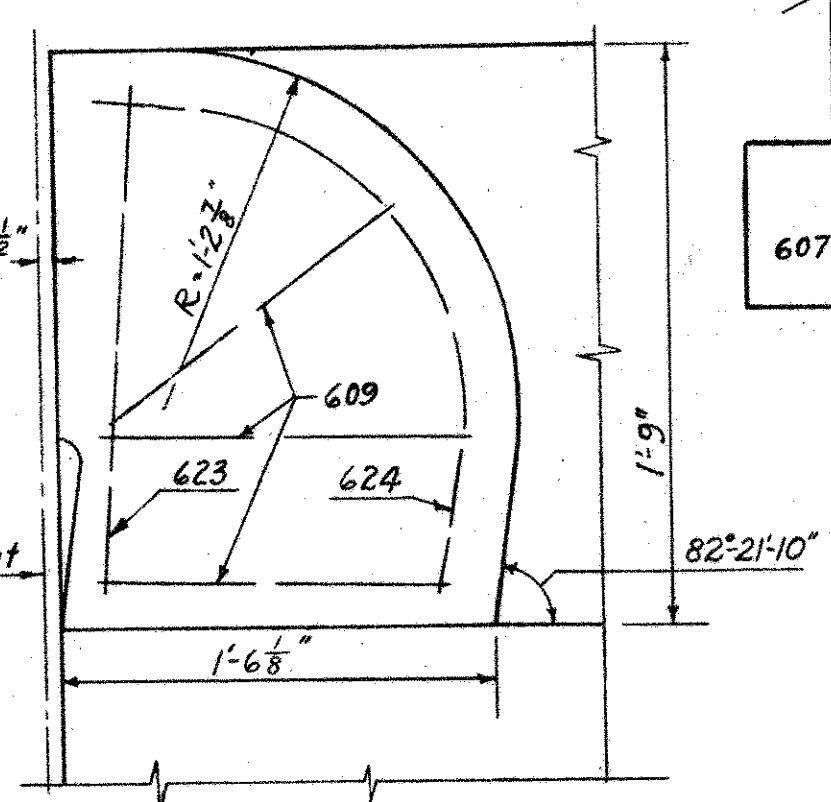
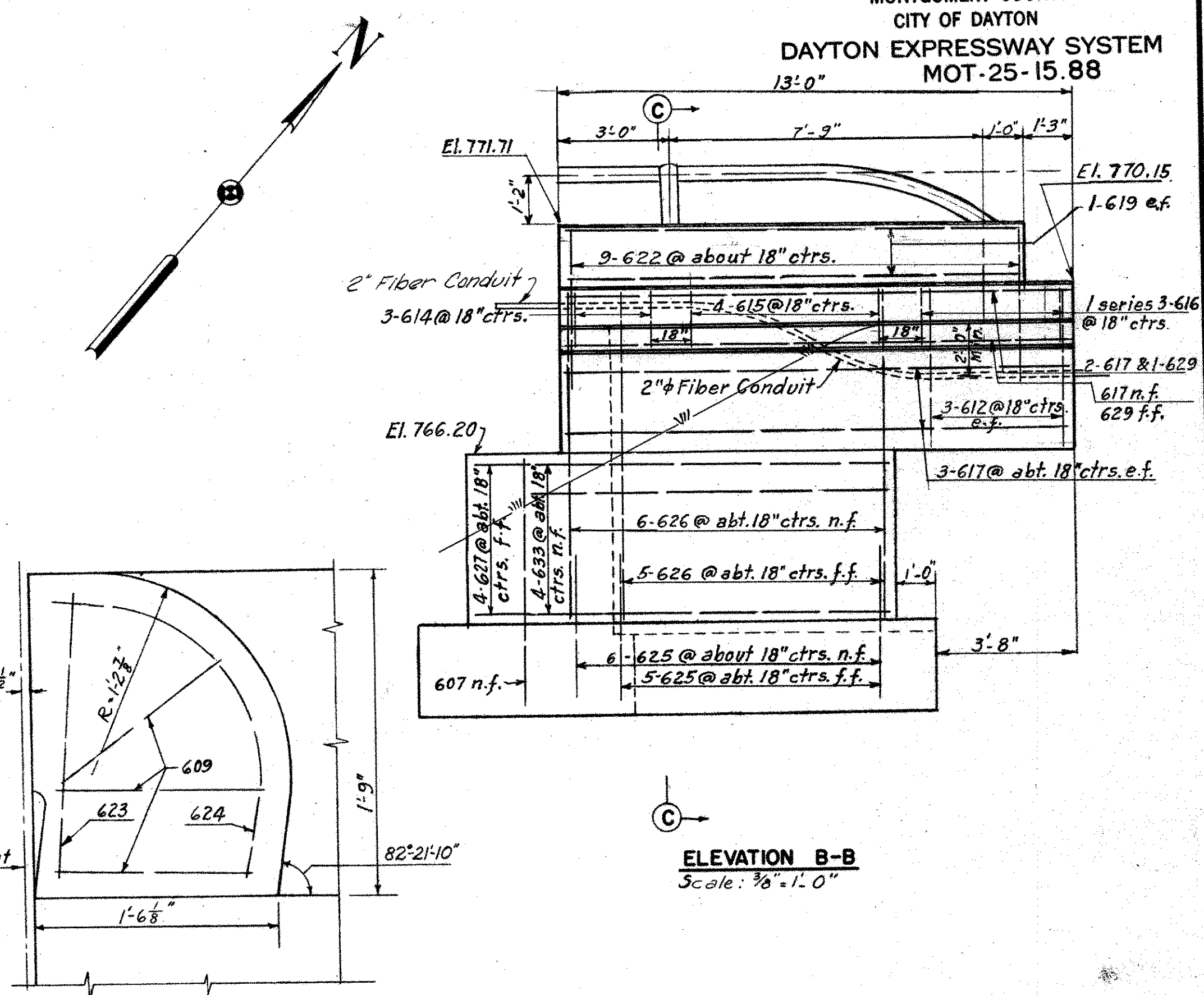
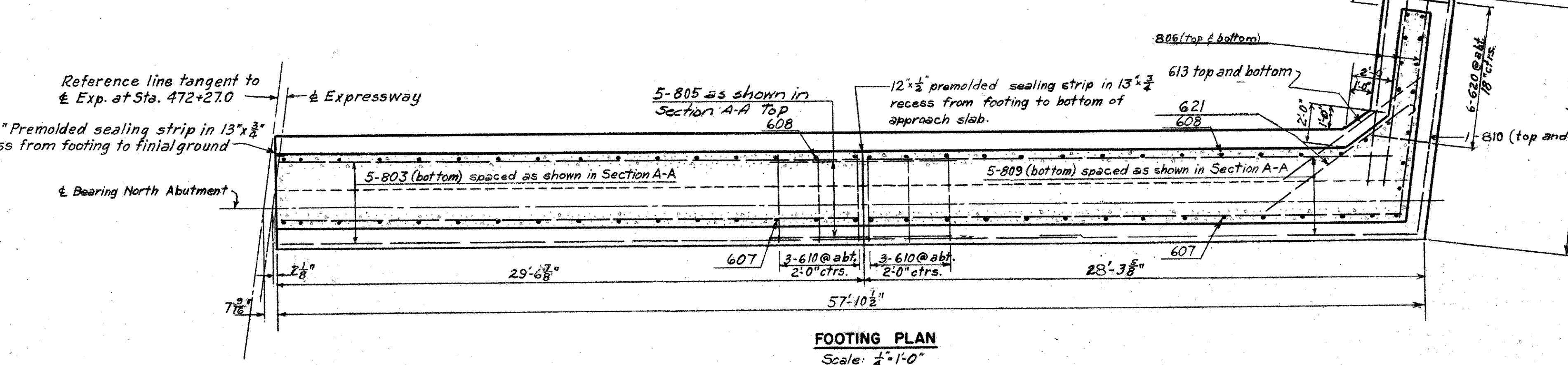
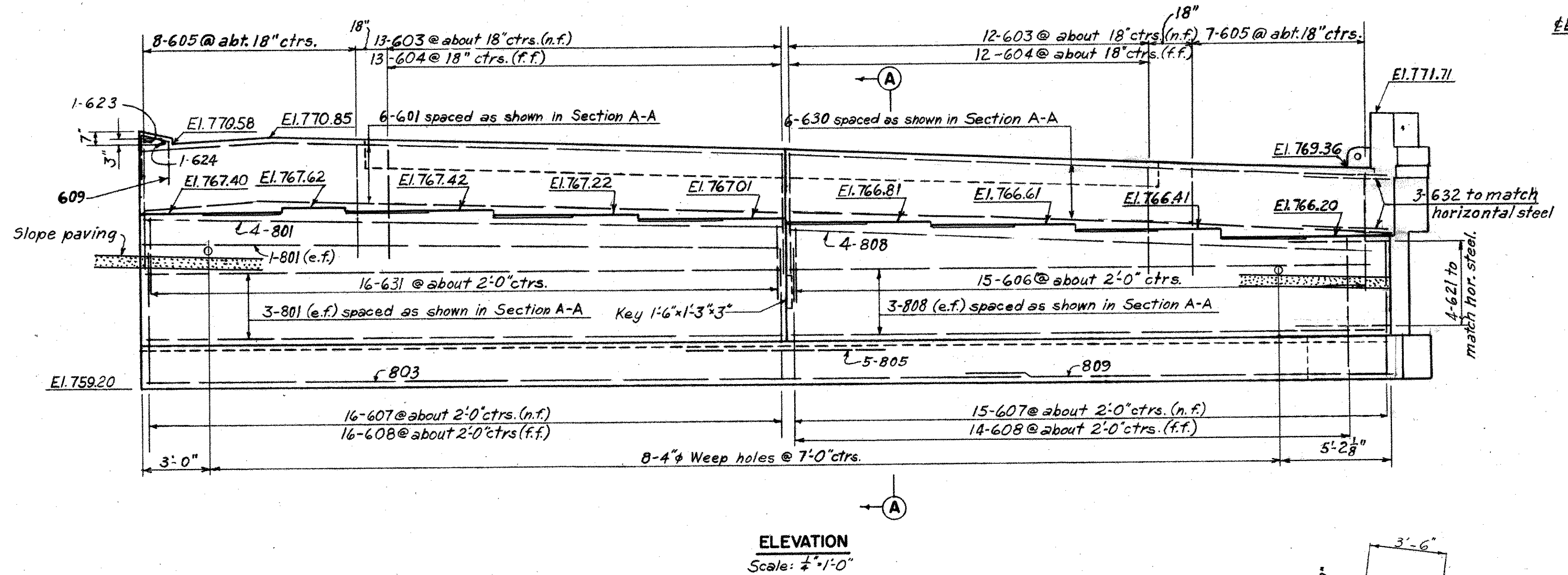
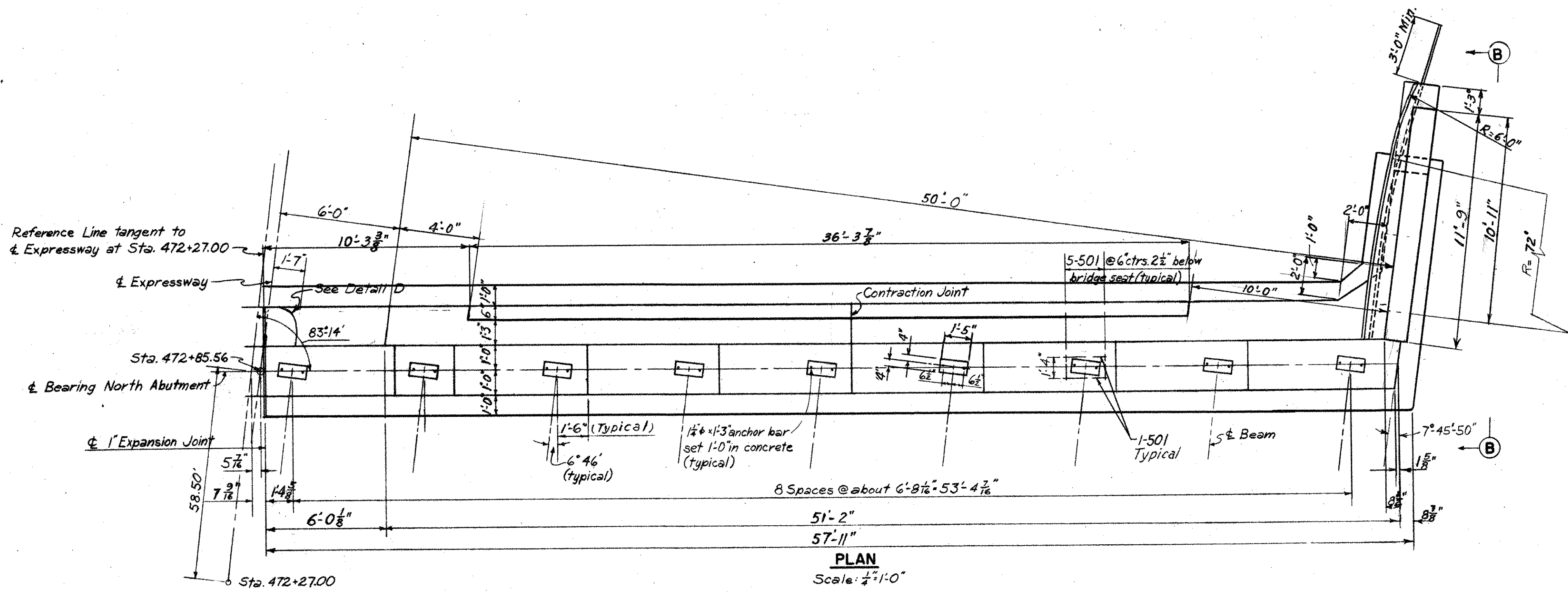
Notes:  
For East Half of North Abutment see sheet 131  
For Reinforcement Schedule see sheet 134  
For details of slope pavement see sheet 104  
For details of porous backfill see sheet 104  
For details of expansion joint see sheet 105  
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HOWARD, NEEDLES, TAMMEN & BERGENDOFF  
CONSULTING ENGINEERS  
KANSAS CITY CLEVELAND NEW YORK

**WEST HALF OF NORTH ABUTMENT**  
EXPRESSWAY OVER NEVA DRIVE  
BR. NO. MOT-25-1703 STA. 471 + 66.29  
SCALE: As Shown 472 + 87.83  
**DAYTON EXPRESSWAY SYSTEM**  
DAYTON, MONTGOMERY COUNTY, OHIO

DRAWN DIT	TRACED	CHECKED RNS	REVIEWED GA	REVISED
DATE 2-7-57	DATE	DATE 10-26-57	DATE 10-26-57	944 SHEET 130

MONTGOMERY COUNTY  
CITY OF DAYTON  
DAYTON EXPRESSWAY SYSTEM  
MOT-25-15.88



Notes:

For West Half of North Abutment see sheet 130

For Reinforcement Schedule see sheet 134

For details of slope pavement see sheet 104

For details of porous backfill see sheet 104

For details of expansion joint see sheet 105

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KANSAS CITY CLEVELAND NEW YORK

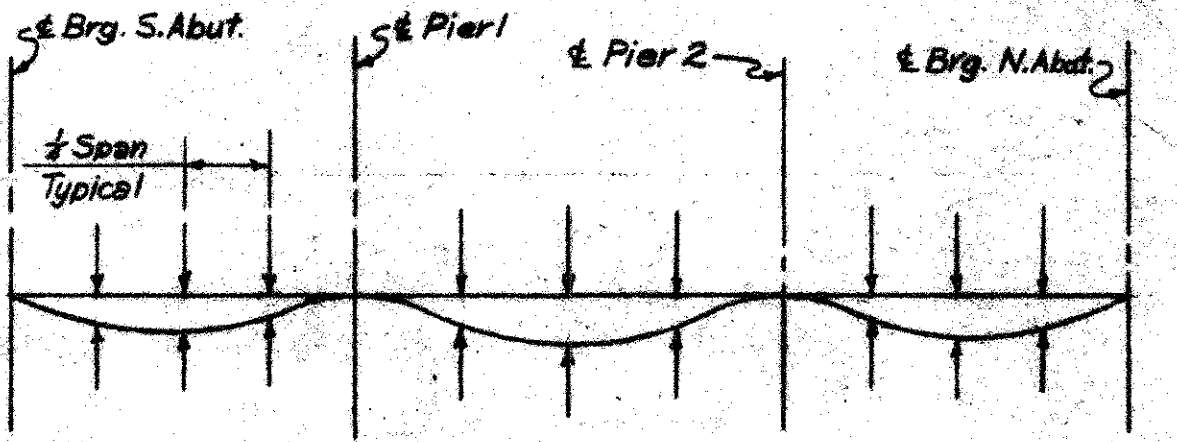
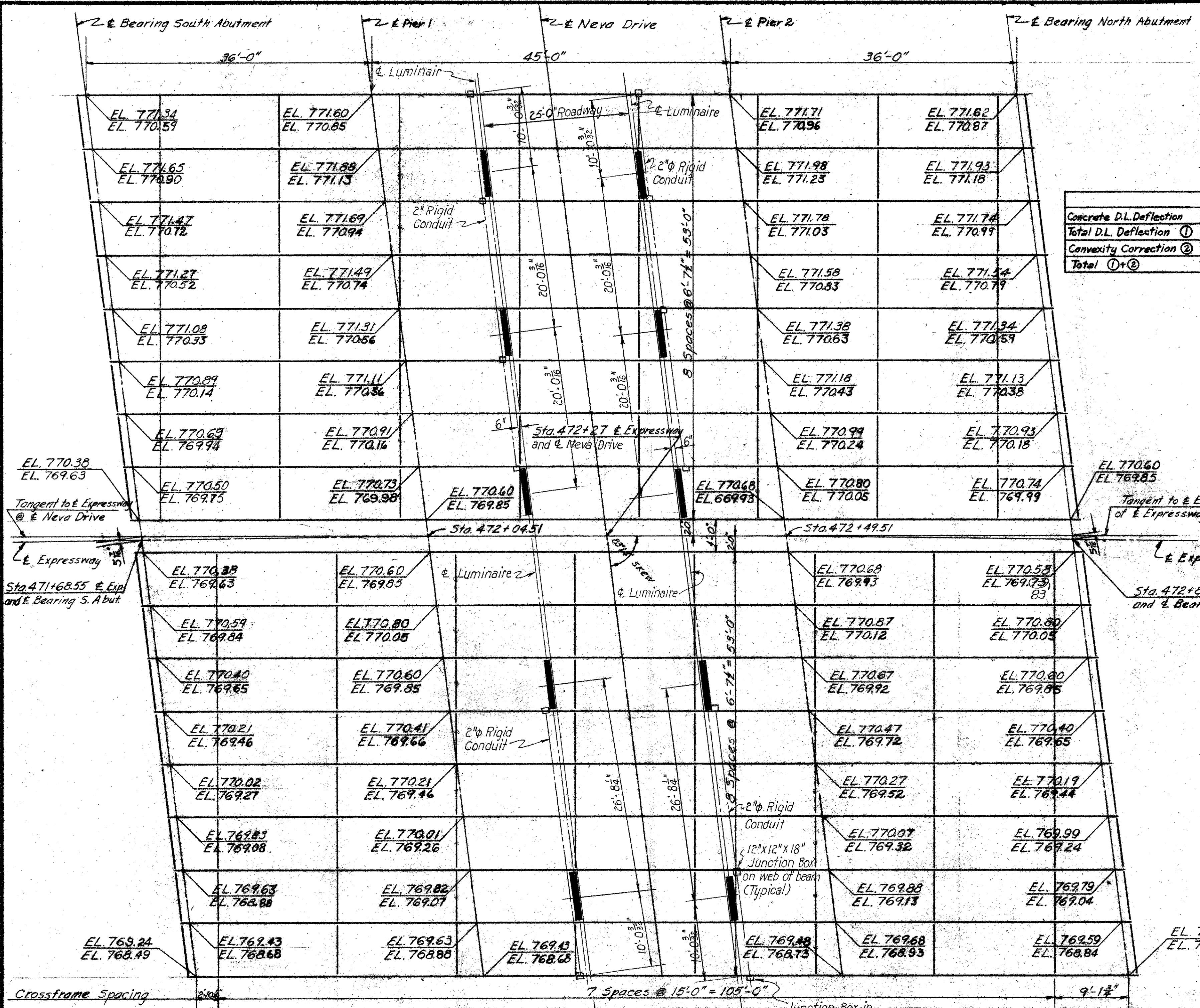
**EAST HALF OF NORTH ABUTMENT**  
EXPRESSWAY OVER NEVA DRIVE

BR. NO. MOT-25-1703 STA. 471 + 66.29  
SCALE: As Shown 472 + 87.83

**DAYTON EXPRESSWAY SYSTEM**  
DAYTON, MONTGOMERY COUNTY, OHIO

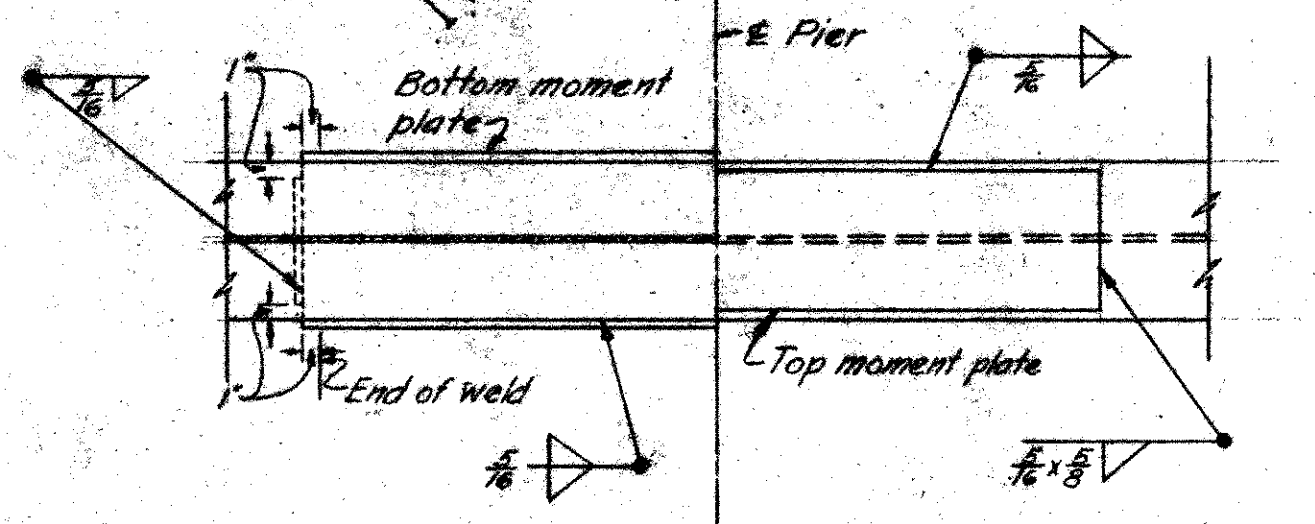
DRAWN DTI	TRACED	CHECKED PMS	REVIEWED	REVISED
DATE 2-15-57	DATE 11-26-57	DATE 6A	DATE 12-26-57	944 SHEET 131

MONTGOMERY COUNTY  
CITY OF DAYTON  
DAYTON EXPRESSWAY SYSTEM  
MOT-25-15.88

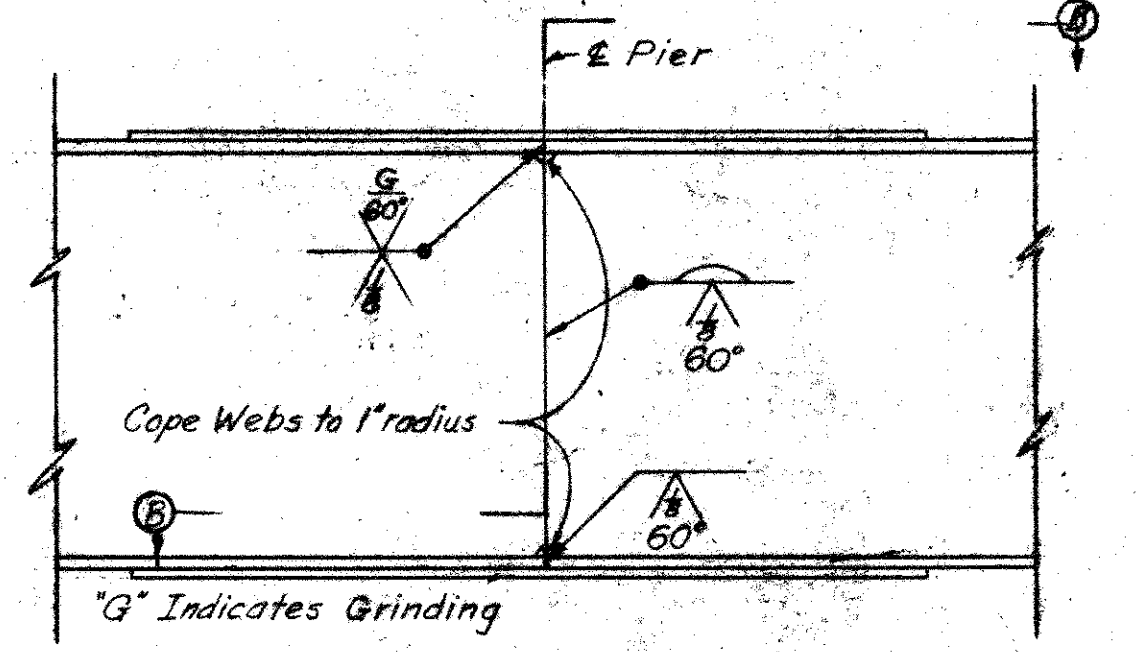


Concrete D.L. Deflection	0	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	0	0	$\frac{1}{8}$	0	0	$\frac{1}{8}$	$\frac{1}{8}$	0
Total D.L. Deflection ①	0	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	0	0	$\frac{1}{8}$	0	0	$\frac{1}{8}$	$\frac{1}{8}$	0
Convexity Correction ②	0	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	0	0	$\frac{1}{8}$	0	0	$\frac{1}{8}$	$\frac{1}{8}$	0
Total ①+②	0	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	0	0	$\frac{1}{8}$	0	0	$\frac{1}{8}$	$\frac{1}{8}$	0

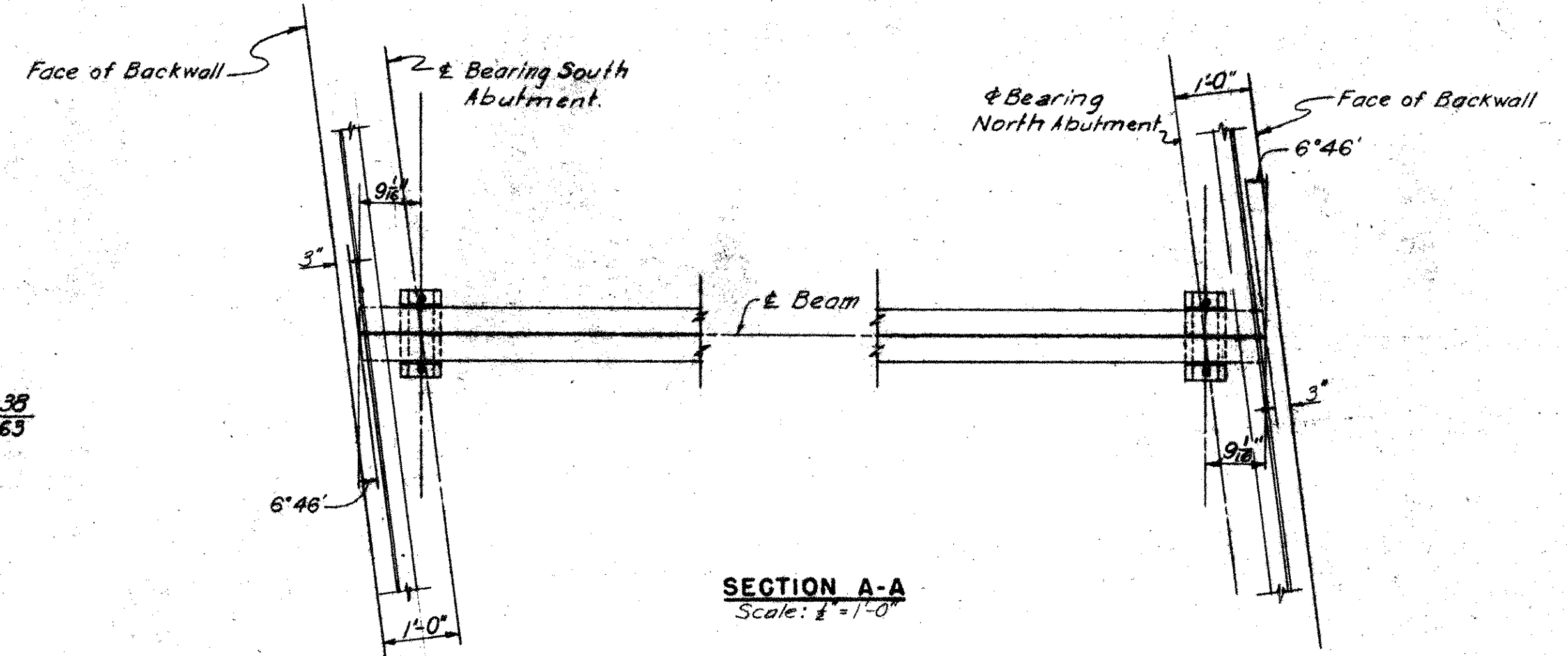
DEFLECTION AND CONVEXITY DATA  
No Scale



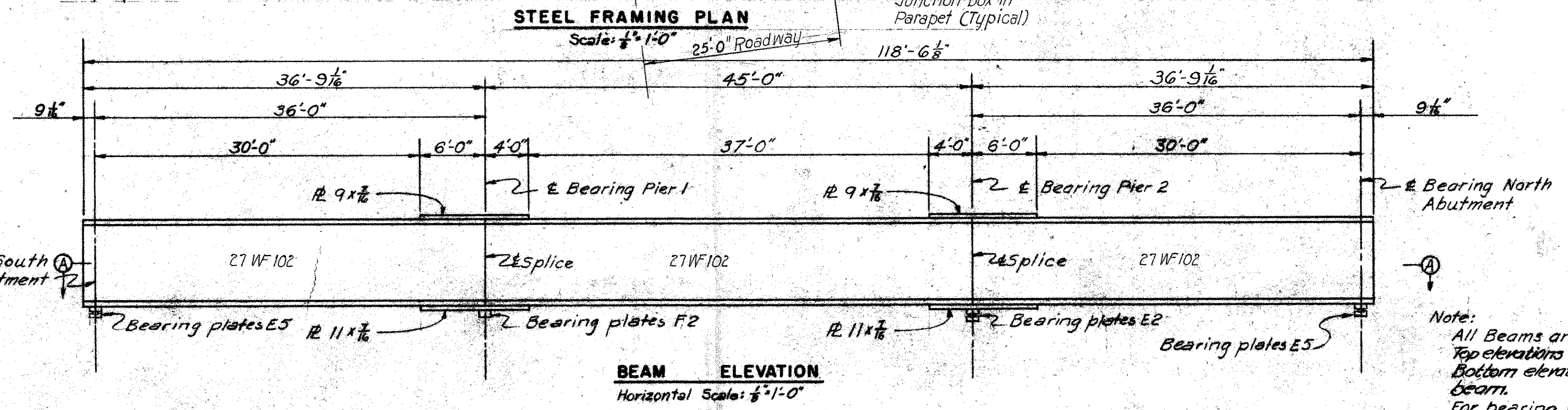
SECTION B-B  
No Scale



BEAM SPLICE DETAILS  
No Scale



SECTION A-A  
Scale:  $\frac{1}{2}$ "=1'-0"



BEAM ELEVATION  
Horizontal Scale:  $\frac{1}{2}$ "=1'-0"

BEAM SPLICE WELDING PROCEDURE

1. Raise the abutment ends of the beams  $\frac{3}{8}$ "
2. Butt-weld the beam flanges and web, using the following sequence: make one pass on each flange, then one on web; repeat until welds are completed.
3. Weld the bottom and top moment plates.
4. Lower the beam ends to final position.
5. Weld crossframes into place.

Note:  
All Beams are 27 WF 102.  
Top elevations denote top of slab.  
Bottom elevations denote top of beam.  
For bearing plate detail see common details sheet 104

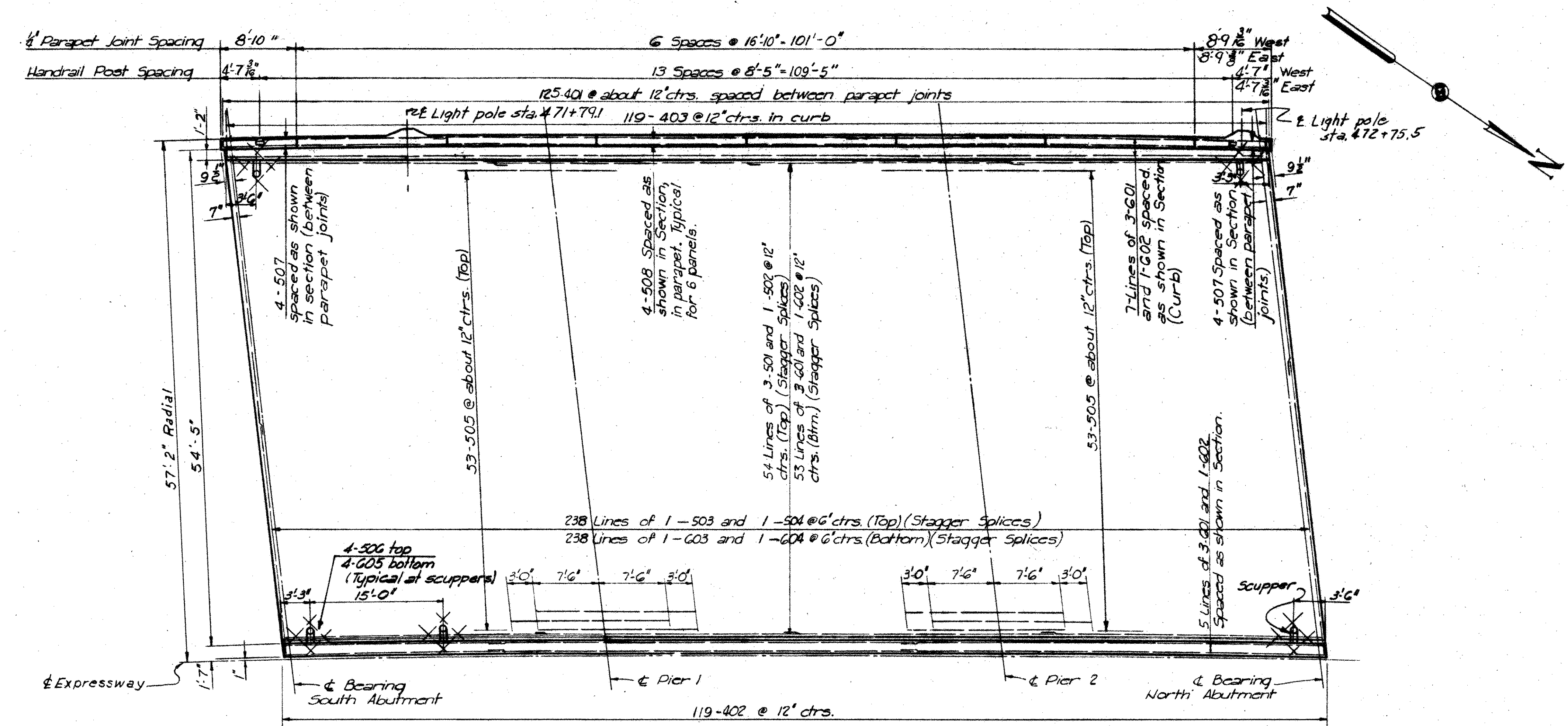
HOWARD, NEEDLES, TAMMEN & BERGENDOFF  
CONSULTING ENGINEERS  
KANSAS CITY CLEVELAND NEW YORK

**FRAMING PLAN AND BEAM ELEVATIONS**  
EXPRESSWAY OVER NEVA DRIVE  
BR. NO. MOT- 25-1703 STA. 471 + 66.29  
SCALE: As Shown 472 + 87.83

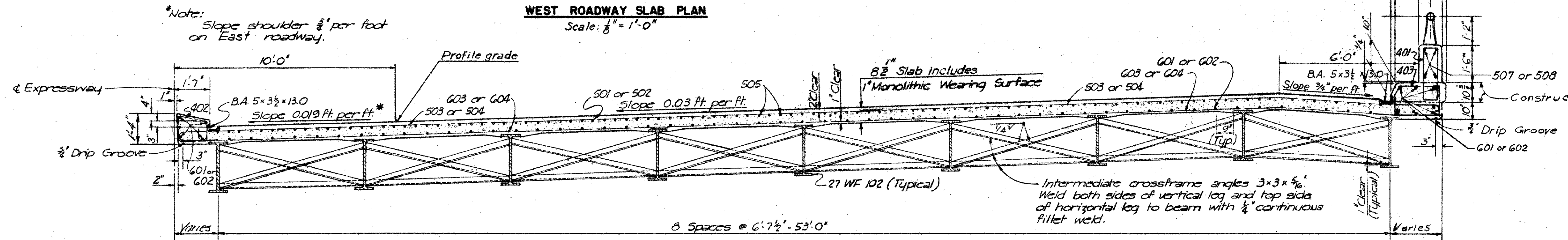
**DAYTON EXPRESSWAY SYSTEM**  
DAYTON, MONTGOMERY COUNTY, OHIO

DRAWN C.E.D.	TRACED	CHECKED A.M.S.	REVIEWED G.A.	REVISED 4-28-59
DATE 12-6-58	DATE	DATE 10-16-58	DATE	944 SHEET 132

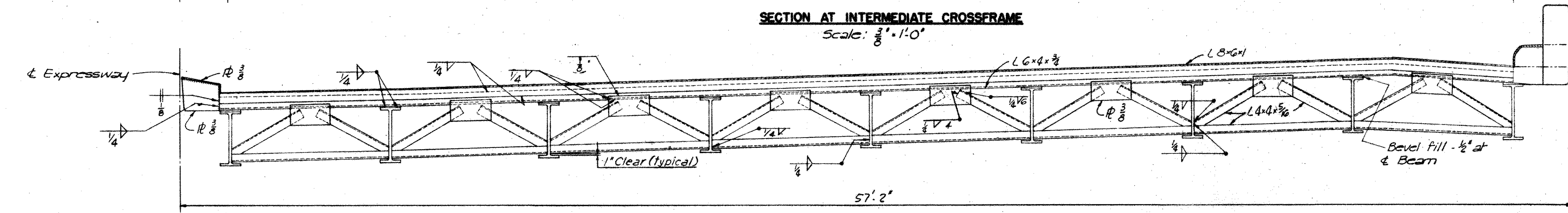




**WEST ROADWAY SLAB PLAN**  
Scale:  $\frac{1}{8}'' = 1'-0''$



**SECTION AT INTERMEDIATE CROSSFRAME**  
Scale:  $\frac{3}{8}'' = 1'-0''$



**SECTION AT ABUTMENT**  
Scale:  $\frac{3}{8}'' = 1'-0''$

Notes:  
For reinforcing steel see sheet 134.  
For expansion joint details see  
Common Details sheets 104 and 105.

For Handrail Details see Common  
Details sheet 105.  
Conduit outlets for light poles are to be  
capped.

For Bulb Angle gutter and support  
see Common Details sheet 104.  
East and West roadways are similar  
except as shown.

HOWARD, NEEDLES, TAMMEN & BERGENOFF  
CONSULTING ENGINEERS  
KANSAS CITY CLEVELAND NEW YORK

**SLAB PLAN AND CROSS SECTION**  
EXPRESSWAY OVER NEVA DRIVE  
BR. NO. MOT- 25-1703 STA. 471 + 66.  
SCALE: As noted 472 + 87.  
**DAYTON EXPRESSWAY SYST**  
DAYTON, MONTGOMERY COUNTY,

DRAWN	TRACED	CHECKED	REVIEWED	REVISION
DATE 3-11-57	DATE	DATE 10-23-57	DATE 10-26-57	944 SHEET

